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No. 5

# EABOR REVIEW

TED STATES DEPARTMENT OF LABOR . BUREAU OF LABOR STATISTICS

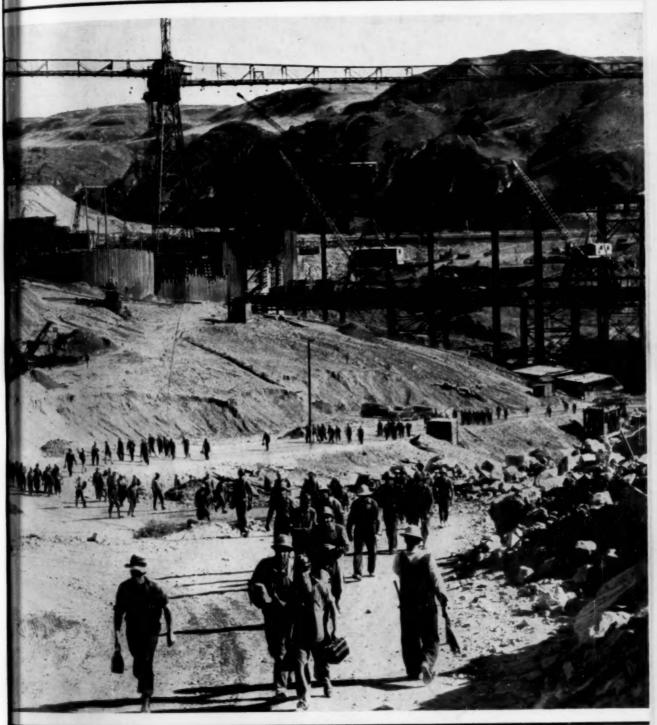


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this issue... Adjustment of Labor Disputes . Municipal

VEMBER 1939 Labor Boards • Industrial-Relations Machinery

Abroad . Accidents in Steel Industry

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# This Issue in Brief

Hourly Earnings in Knit-goods.

Hourly earnings of workers in the knitted-underwear industry averaged 39.9 cents in August and September 1938, as compared with 45.8 cents in the knitted-outerwear industry, 56.0 cents in plants making knitted cloth, and 40.9 cents in glove-knitting estab-Approximately fourths of the employees in the underwear and outerwear industries and four-fifths of those in glove plants were women. In the knitted cloth industry, on the other hand, threefourths of the workers were men. Males received substantially higher earnings than females in each industry surveyed. These figures are based on data secured in a survey by the Bureau of Labor Statistics immediately preceding October 24, 1938, the date on which the Fair Labor Standards Act became effective. Page 1173.

#### Adjustment of Labor Disputes.

Various kinds of governmental and private machinery exist in the United States for the adjustment of labor disputes. Most common among the nongovernmental agencies are the joint boards or impartial chairmen established by employers and unions to adjust grievances arising under collective agreements. Among the governmental bodies are the National Labor Relations Board, handling disputes over questions of union recognition and unfair labor practices; the National Mediation Board, which handles railroad disputes; and the Federal

Conciliation Service, which intervenes upon request in any dispute anywhere in the country. Most of the States and a few of the cities also maintain conciliation and arbitration services. These vary greatly both in their mechanical and procedural arrangements. For a description of these various types of dispute-adjustment machinery, see page 1023.

#### Waste from Depression Unemployment.

During the years 1930 to 1937, the amount of potential real income not produced because of unemployment totaled more than \$200,000,000,000, according to estimates by the National Resources Committee. The significance of this vast amount is perhaps more readily grasped in terms of the statement that it is enough to build a new \$6,000 house for every family in the country. Even these estimates make allowance for the unemployment of about 2,000,000 workers. Such gigantic waste is serious in its effects on individuals. The purpose of the National Resources Committee in its report on waste is to facilitate a democratic solution of the problem of waste arising from the imperfect functioning of the country's economy. Page 1075.

#### Union Scales in the Building Trades.

The average union wage rate per hour was \$1.364 for all of the building trades in the 72 cities covered in a survey by the Bureau of Labor Statistics on June 1, 1939. This represented an increase of 0.6 percent above 1938. The average for the

journeyman trades was \$1.468, and for the helper and laborer trades \$0.866. Weekly hours as provided for in the agreements of all trades averaged 38.3. Comparatively few changes in hour scales were reported between 1938 and 1939. Forty hours per week was the union scale for over two-thirds of the total membership covered in the study. Page 1203.

#### Industrial Relations Abroad.

Increased responsibility for maintenance of equitable working standards and settlement of industrial disputes has been placed on organized employer and employee groups, in a number of democratically governed foreign countries, under recent legislation. This is exemplified by widespread enactment of laws extending the terms of voluntary collective agreements negotiated by groups within particular industries to cover operations in a whole district or industry. Another noteworthy development is the greater participation of governments in facilitating peaceful employer-employee relations. National procedure in regulating industrial relations, as it existed in 11 countries just prior to the outbreak of war, is described in the article beginning on page 1050. These countries are Canada, Great Britain, Ireland, Belgium, France, the Netherlands, the Scandinavian countries, Australia, and New Zealand.

#### Municipal Labor Boards.

Considerable success in settling and even in preventing labor disputes has been attained by the municipal labor boards of Toledo, Ohio, and Newark, N. J. The success of the former board, established in July 1935, led in fact to the formation of the Newark body

some 2 years later. These two organizations, without any powers of compulsion, have handled several hundred disputes and made a substantial contribution to industrial peace in their respective areas of operation. Their make-up and activities are described on page 1045.

#### Accidents in Steel Industry.

The number of disabling injuries per million hours worked in the iron and steel industry decreased from 14.93 in 1937 to 11.28 in 1938. This decrease in the frequency rate was accompanied by a decrease of employee-hours worked of nearly 44 percent in the 1,778 identical departments reporting for both years. The favorable reduction in the frequency rate, however, was offset in part by an increase in the ratio of fatal and permanent total disabilities, which increased from 11 per 1,000 disabling injuries in 1937 to 15 in 1938. The ratio of permanent partial injuries increased similarly from 65 to 82. This change toward fewer but more severe injuries was further indicated by an increase in the average duration of temporary total disabilities from 25 to 33 days. Page 1111.

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#### Registration of Aliens.

Registration of aliens will be required under the terms of a law recently adopted in Pennsylvania. Among other things, the registration must show the name, age, address, occupation, and characteristics of appearance of each alien coming within the purview of the law. The Pennsylvania Department of Labor and Industry has been charged with the administration of the law. Page 1135.

# MONTHLY LABOR REVIEW

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FOR NOVEMBER 1939

### ADJUSTMENT OF LABOR DISPUTES

By Florence Peterson, Bureau of Labor Statistics

EMPLOYER-EMPLOYEE disputes in a democratic, industrial country fall into four general categories: (1) Those caused by conflicting interpretation or the nonobservance of the terms of an employer-union agreement; (2) those concerning conditions of employment—wages, hours, working rules, etc.—when such have not already been agreed upon and the terms embodied in a collective agreement; (3) jurisdictional disputes or controversies between two or more unions as to which shall have jurisdiction over certain jobs or kinds of work; (4) disputes concerning the rights of workers to organize and to bargain collectively with their employer, including such incidental issues as protest against discrimination for union activity, etc.

Until very recently there was no legal acknowledgment in the United States of any distinction in the kinds of disputes which arise between employers and employees. The Railroad Labor Act in 1926, section 7 (a) of the National Industrial Recovery Act in 1933, and the National Labor Relations Act in 1935 gave to workers certain statutory rights and protections in their bargaining relations with their employers. These laws thereby distinguished disputes arising over union recognition and the right to bargain collectively from all other kinds of employer-employee disputes. The laws established special quasi-judicial agencies to make determinations on the basis of facts revealed by investigations and hearings.

The National Labor Relations Board and the several State labor relations boards which are patterned along similar lines cannot strictly be called arbitration or conciliation agencies, although certain phases of their work approximate that of conciliation and arbitration. When a complaint is first made to a representative of the National Labor Relations Board, he may, and frequently does, act as a mediator in an attempt to get the parties to agree to obey the law. While the terms of the law are explicit and cannot be compromised, settlement of questions over specific application and adaptations

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necessarily have to be made. In such a capacity the representative of the Board serves more as a peace officer than as a conciliator. If the matter is not settled through mutual counsel and formal charges are issued, then the agency must exercise its judicial powers and make a decision on the basis of facts as related to the law. Insofar as such decisions are final—subject to court review—they resemble arbitration awards. However, the function of the Labor Relations Board differs vitally from that of an industrial arbitrator, for the Board makes its determinations solely on the legality or illegality of a matter in dispute, while the industrial arbitrator bases his decision on the provisions of a contract which has been mutually accepted, or upon conflicting proposed terms of a new agreement. In the latter case, the arbitrator considers the economic interests of the several parties, taking into account their relative bargaining strength, the ability of either to carry on under given or proposed conditions, etc.

Since this article is concerned only with arbitration and conciliation, the work of the National and State labor relations boards and similar functions of the National Mediation Board will not be discussed here. The conciliation activities of the latter will, however, be

referred to.

# Disputes Which Are Subject to Arbitration and Conciliation

In general, it may be said that conciliation and arbitration are concerned with disputes: (1) Where the collective-bargaining relationship has been established but where there is a controversy over the interpretation, application, or observance of certain terms in an agreement already entered into by the employer and the union. (2) Where there is a controversy over the terms of a new agreement under negotiation, or where there is no collective bargaining but where the right to bargain collectively is not the issue. The matter in dispute, as under a collective-bargaining situation when a new agreement is under consideration, is a question over particular issues such as wages, hours, or other employment conditions. Such disputes are rare in an unorganized plant, because it is difficult for a number of individuals without leadership or financial backing to express their grievances in an overt act of protest. (3) Over rights between two or more unions to perform a certain job. There is a distinct difference between jurisdictional disputes and disputes between rival unions. between rival unions is likely to come under the jurisdiction of a labor relations board, since it is a matter of determining which union a majority of the workers in a certain trade or plant wish to have represent them. In a jurisdictional dispute, it is a question of which union has jurisdiction over a certain trade or kind of work, the workers themselves already having chosen their bargaining agency.

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Disputes arising over the interpretation, application, or enforcement of an agreement already in force are more amenable to arbitration, since the basic terms of the employment relationship have been negotiated and embodied in the collective agreement. The arbitrator's sole duty is to clarify ambiguous clauses, to relate a general rule to a specific situation, or to determine whether or not the accused party has actually violated any of its terms. In theory, such disputes would not be subject to conciliation, since conciliation implies compromise and a give-and-take kind of adjustment.<sup>1</sup>

Disputes arising over terms to be included in a new agreement are of an altogether different nature. These are controversies over what general wages, hours, and working rules should be adopted. They are not controversies over rights accruing from the terms of a contract, although each side may feel that "moral" or "natural" rights are at stake. The union, for instance, may contend that the workers have a moral right to what they consider to be a fair wage; the employer, on the other hand, may contend that the wage asked for will interfere with his natural right to engage in profitable business. The question of what is "fair," however, has not been mutually determined and this is the basic cause of the dispute.

While either one or both parties may ask for the assistance of an outside mediator in such a dispute, employers and unions are less likely to have such questions arbitrated, especially at the beginning of a dispute. When one side finds its position relatively weak, it may seek arbitration, but the other party is not likely to agree. If the dispute has been prolonged into a stalemate, both sides may be willing to have the matter arbitrated. In such instances, both sides have given evidence that their bargaining strength, their withholding power, is about equal, and an outsider's decision is sought merely to bring to a speedier conclusion a settlement which, it is assumed, would result if the dispute were prolonged. It does not necessarily mean that a strike or lock-out must take place before such arbitration is sought. If both sides are aware that their bargaining strength is about equal, they may seek arbitration in order to avoid a stoppage of work.

In the case of jurisdictional disputes, if both the unions concerned belong to the same affiliated organization, this organization usually attempts settlement. In many instances the city or national federation, such as the City Trades Council or Building Trades Department of the American Federation of Labor, has established special machinery for the adjustment of jurisdictional disputes. At the request of one or both parties, Government agencies may intervene.

<sup>&</sup>lt;sup>1</sup> In many of the European countries, which have had a longer experience with collective bargaining than the United States has had, there are special legal and quasi-legal arrangements for the arbitration of disputes arising over the interpretation of an agreement, called "disputes on rights," and the conciliation or arbitration of disputes over terms of a new agreement, called "disputes on interests."

When they enter such disputes, however, they usually serve as conciliators and not arbitrators, since organized labor has been averse to having governmental agencies impose final awards in controversies arising among its various groups.

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# Arbitration and Conciliation Agencies

There are two main channels through which labor disputes in this country are adjusted: (1) Committees of private citizens or individual arbitrators who are appointed directly by the parties concerned in the disputes. These may be permanent joint boards or impartial chairmen, who function continuously for an industry or area, or a person or agency temporarily selected to mediate or act as arbitrator upon specific occasion. (2) Governmental agencies, Federal, State, and local. These may be permanent boards established by law, or they may be ad hoc committees appointed by the President, governor, or mayor in pursuance of a law which permits or requires such appointment when certain occasions arise.

# Nongovernmental Agencies

#### UNION-EMPLOYER ARRANGEMENTS

In industries where both the employers and workers are well organized there may be joint boards or an impartial chairman appointed and financed by the employers and unions concerned. In some instances a government agency may have helped to establish such a joint board and even appointed its first chairman. Thereafter, however, the joint board is what its name implies—an agency maintained by the employers and the unions. The jurisdiction of such boards is usually confined to the plants of an industry located in one city or market area, although some function over an entire industry. Most frequently, the impartial chairman is an economist or labor-relations specialist who devotes his full time to the adjusting of disputes and "policing" the industry. In some instances he not only serves as umpire between the two factions but has become a consultant and research agent for general problems affecting the industry. Illustrations of employerunion arrangements for handling disputes are found in the clothing, printing, mining, and other industries.

Whenever disputes are referred to such joint industry boards or impartial chairmen, it is expected that their decisions shall be final. Through such machinery employers and unions voluntarily adopt a means for mandatory adjustment of disputes. Obviously, such an arrangement can exist only where there is collective bargaining, for its functioning is contingent upon the presence of a collective agreement. At the lapse of an agreement the arrangement automatically

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ceases, although both sides may tentatively agree to continue the office if there is a desire or hope that the terms of a new agreement can soon be agreed upon. Indeed, the impartial chairman may be an important factor in getting a new agreement signed. In this capacity, however, he serves as a mediator and not as a referee or umpire. His decisions are not binding and the parties concerned may decide to call a strike or a lock-out rather than accept his suggestions for peaceable settlement.

A common procedure under collective-bargaining arrangements is the appointment of a disinterested private citizen or committee to arbitrate a particular dispute after it arises. As is the case with the permanent joint boards, it is usually only those disputes arising over questions of interpretation or enforcement of an agreement which are referred to such an impartial arbitrator. Very seldom is an outsider given the responsibility of deciding the basic terms to be included in a new contract. When such is done the arbitrator is usually hedged in with certain limitations or restrictions as, for example, on the question of a wage scale, when he is instructed to make a determination on some such specific basis as the wages prevailing in the industry or area, or a change in the cost of living, etc.

#### AMERICAN ARBITRATION ASSOCIATION

Since 1937, when it established an Industrial Arbitration Tribunal, the American Arbitration Association, a nonofficial agency, has arbitrated a number of employer-union disputes. The Tribunal offers a panel of arbitrators from which the two parties make the selection. Only disputes arising over the interpretation or application of a labor contract are accepted. Either party may apply for arbitration if such permission is already provided for in the collective agreement; otherwise both parties must voluntarily submit the case. In contrast to the joint boards in a particular industry, the Tribunal is not a permanent board of arbitrators to hear and determine any and all cases which arise. It is a mechanism by which arbitrators are selected for each dispute in accordance with its peculiar requirements. The method in which hearings are held and evidence taken is more formal than is usually the case with the joint boards, since it is intended that the awards can be legally enforceable should either party resort to such enforcement measures.

#### LOCAL COMMITTEES

In a number of cities certain individuals or groups have organized committees whose primary function has been the settling of disputes and improvement of employer-employee relations within the community. Usually these committees have originated with some

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employer group—the local chamber of commerce, the manufacturers' association—which has then asked labor to cooperate. Sometimes the mayor has initiated the movement by calling together representatives of employers, unions, and the public. In other cases an outstanding citizen has assumed leadership. The urge for the establishment of such local committees has usually come at a time when the community has experienced a serious strike or a series of strikes.

The experience of local nongovernmental conciliation committees has revealed that they function under some very severe handicaps. Citizens having no direct interest in the dispute must of necessity be represented on such committees, and it is frequently difficult to get qualified persons who are willing to spend the time necessary for the tedious task of mediation. Also, a private citizen is loathe to enter into a dispute between two factions in his own community, particularly if he himself is engaged in a local business. Persons from outside the community are likely to have more prestige and carry greater confidence, even though they may not be any better qualified than local citizens.

In spite of these handicaps, local committees of private citizens in a number of communities have proved very helpful in settling disputes, particularly those which occur in the service and local transportation industries.

## Government Conciliation and Arbitration

Federal and State agencies for the adjustment of labor disputes vary greatly in their mechanical arrangements—the type of personnel, by whom appointed and to whom responsible, the formality or informality of their investigations, etc. Much more significant, however, are the possible differences in degree of voluntarism or compulsion exercised throughout the progress of the dispute, from the first threat to call a strike or lockout to the final termination or settlement.

A purely voluntary arrangement exists when the adjustment agency has neither the power to compel the parties to the dispute to submit the matter to it, nor to accept any decision it might make. The agency exists for the convenience of either or both parties to use, so long as they desire, but there is no compulsion or even implied obligation to ask for its assistance. This is commonly referred to as voluntary mediation.

A second type is a procedure which permits or requires the conciliation agency to investigate any or all disputes, even though the parties concerned have not asked for such intervention. The agency may or may not have the power of subpoena. On the basis of this investigation it may recommend terms of settlement. Neither party, however, is obligated to accept its recommendations. This procedure may be termed compulsory investigation and voluntary acceptance. It implies the foregoing of strike action during a limited

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time while investigation is under way. A variant of these two types exists when neither party is obligated to refer the dispute to the outside agency, but, after both parties have once submitted the matter, acceptance of its recommendations is mandatory. This is usually called voluntary submission with compulsory acceptance.

The most extreme form of procedure for the settlement of labor disputes exists where a governmental agency is given the power to investigate and to make an award which must be accepted. This is compulsory arbitration and is generally accompanied by the requirement that there be no stoppage of work. Compulsory arbitration usually implies, therefore, that strikes and lock-outs are illegal. It must be noted that reference here is to compulsory arbitration established by law, which is totally different from compulsory arbitration established by agreement between employer and union. The latter is voluntary acceptance of an arbitration process of settling certain carefully defined kinds of disputes after basic terms in the working contract have been mutually agreed upon.

Legal compulsory arbitration does not at present exist anywhere in the United States. By court decision, as well as preponderance of public opinion, it is held to be contrary to a free, democratic form of government. In only rare instances have government agencies been given the authority even to investigate or to make recommendations if neither party has asked for such outside intervention. Predominantly in this country legislation dealing with the settlement of labor disputes has clearly indicated that any government intervention shall be voluntarily agreed upon by the parties concerned, and that acceptance of the findings or recommendations shall be optional unless both parties have voluntarily agreed in advance to accept an arbitrator's decision.

#### WAR-TIME ADJUSTMENT OF DISPUTES

Even during the critical years of the World War, when the Government adopted the general principle of "no strikes in wartime," there was no Federal legislation compelling either employers or workers to submit their disputes to any Government agency.<sup>2</sup> The Government, however, could exercise certain pressures: Many of the contracts let by the War Department contained a labor clause requiring disputes to be submitted to any person or agency nominated by the Secretary of War; through the powers conferred upon the War Industries Board and the Fuel Administration, the Government could shut off raw materials to a recalcitrant employer; the President might

<sup>&</sup>lt;sup>3</sup> One possible exception might be noted, that is, the Lever Act, passed October 10, 1917, giving the President far-reaching powers over production and distribution of fuel and food products. The mandatory features of this act were never applied to a labor dispute until after the close of the war. When the bituminous-coal miners in the fall of 1919 called a strike for a wage increase, the Federal Government obtained an injunction restraining the union from calling such a strike and tying up the union's funds so that no strike benefits could be paid. The injunction, however, failed to keep the 400,000 men from going out on strike. The President and the Secretary of Labor thereupon intervened and obtained a compromise settlement.

even take over the plant if there was a serious stoppage of work. In the case of the workers the Government could threaten to draft the strikers, and refuse to them the assistance of the United States Employment Service. All such powers and threats were used upon

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only a very few occasions.

Chief reliance for the settlement of disputes during the war was placed upon conciliation and mediation. A separate board was created for each of the more important industries, and a National War Labor Board was established for disputes in essential war industries and as a supreme tribunal for appeals from the industry boards, These boards settled many strikes and threatened strikes. Whatever results they accomplished were due to their conciliatory efforts and to the pressure of public opinion, which opposed serious stoppages in production during the war. The boards had no legal power to compel either employers or employees to submit any matter of dispute to them, nor to compel either side to accept their decisions once they had intervened. The prestige of the boards enabled them to obtain compliance in most of the disputes in which they intervened during the time the war was in progress. After the armistice was signed, however, employers and employees refused to carry out their recommendations. The industry boards soon ceased to function and in August 1919 the National War Labor Board was formally dissolved.

#### KANSAS COURT OF INDUSTRIAL RELATIONS

The only experience this country has had with compulsory arbitration was that of the Kansas Court of Industrial Relations, which functioned from 1920 to 1923. This court was given jurisdiction in disputes arising in the public utilities, coal, food, and clothing industries, wherein strikes were altogether prohibited in Kansas. The 3-man court, appointed by the Governor, had power to fix wages and conditions of employment in these industries. Proceedings before the court could be started by the court on its own initiative, by employers, by unions, or by a specified number of unorganized workers, or the public. Its decisions were binding and violations were punishable as criminal offenses.

Labor, particularly the Kansas district of the United Mine Workers, bitterly opposed the establishment of the court. Several of the union leaders were given jail sentences when they defied the antistrike clause of the act by calling a number of strikes. Some em-

<sup>&</sup>lt;sup>3</sup> This happened in a few cases. When the Western Union, for example, refused to reinstate men whom it had discharged for joining the union, the Government took over the wires. Labor contended, however, that the company officials who had been opposed to the demands of the workers were put on the Government's Wire Control Board and that union discrimination continued.

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ever, vernployers also refused to put into effect its wage and hour decisions. The United States Supreme Court sustained these employers, when such cases were presented to it, by declaring the entire scheme of compulsory arbitration to be unconstitutional for industries not peculiarly affected with the public interest, thus depriving the Industrial Relations Court of jurisdiction in manufacturing and transportation industries. The Supreme Court held that the fixing of wages and hours, rules and regulations by such an agency was contrary to the due process clause of the fourteenth amendment in that it "curtailed the right of the employer, on the one hand, and of the employee, on the other, to contract about his affairs."

Before even the first of these Supreme Court decisions was rendered, the Industrial Relations Court had practically ceased to function, because of the increasing opposition and indifference of the employers, workers, and public. In 1925 the court was abolished altogether.

The short-lived experiment of Kansas with compulsory arbitration was one of the aftereffects of the war psychology. It was inaugurated after the State had taken over the operation of the mines in order to end a coal strike. The returning soldiers who filled the strikers' places, as well as the general public, were prone to consider all strikes as unpatriotic and to welcome a device which would make them illegal. Within a few months many of the court's most ardent supporters began to question the implications of such legal compulsion in the employer-employee relationship and to oppose specific actions and decisions of the court.

#### COLORADO COMPULSORY INVESTIGATION

Except for the brief experiment in Kansas, no governmental unit in the United States has passed legislation for the compulsory arbitration of labor disputes. Before this experiment, however, Colorado had provided for the compulsory investigation of disputes. The Colorado Industrial Relations Act, passed in 1915 following the bitter coal strike of the previous year, prohibits strikes and lock-outs in industries affected with a public interest, pending investigation and report by the Industrial Commission. Employers and employees are required to give to the Commission 30 days' notice of any "intended change affecting conditions of employment or with respect to wages or hours." It is "unlawful for any employer to declare or to cause a lock-out, or for any employee to go on strike, on account of any dispute prior to or during an investigation, hearing, or arbitration of such dispute by the Commission."

Although investigation is compulsory, the findings of the Commission are not binding unless the parties have agreed in advance to

abide by the award. "Nothing in this act shall be held to restrain any employer from declaring a lock-out nor any employee from going on strike, in respect to any dispute, after the same has been duly investigated, heard, or arbitrated under the provisions of this act."

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The Colorado Industrial Relations law, passed almost 35 years ago, is still in effect. During the 4-year period 1934–38, the Commission received 524 notices of changes in wages and hours and working conditions. In only 74 instances were formal arbitration awards made. Although the Commission's reports do not indicate what happened in the other cases, presumably they were settled through conciliation or, if such failed, developed into a strike or lock-out. During this period there were at least 41 strikes, involving 13,000 workers. A number of these, no doubt, were outside the jurisdiction of the law as not being "affected with the public interest." In some, the law was not applied or enforced. During the general bituminous coal stoppage in May 1939, over 7,000 Colorado miners participated, with no legal action taken against them except the denial of unemployment compensation.

#### RAILROAD MEDIATION

Because of the importance of railroads in the Nation's economic life, the Government very early began to concern itself with railroad labor relations. An arbitration act providing for the voluntary investigation of disputes was passed in 1888, but never used. The Erdman Act of 1898 provided for mediation and arbitration by the Commissioner of Labor and the chairman of the Interstate Commerce Commission. The Newlands Act of 1913 created a permanent, full-time Board of Mediation and Conciliation. Under both of these acts, if Government mediators failed to obtain a settlement, they were to try to get the parties to agree to arbitration. Special tripartite arbitration boards were appointed for each such dispute, the Government appointing the neutral members if the others failed to come to an agreement. Awards made by the arbitration boards were binding.

When, in 1916, the railroads refused to accede to the employees' demand for an 8-hour day, the employees threatened a general strike and refused to submit the matter to arbitration. The Railroad Brotherhoods' refusal was based on the belief that the public representatives on previous arbitration boards, who actually determined the cases, were unsympathetic toward labor and that such awards as were favorable to labor were not obeyed by the railroads. This strike was averted by the enactment of the Adamson Act establishing a basic 8-hour day.

During the Federal control of the railroads in 1917-20 railway boards of adjustment were established, composed of an equal number

In proportion to total working population, a number of States have had fewer workers involved in strikes than Colorado, although many more States exceeded Colorado's percentage.

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of management and employee representatives, which had authority to make decisions in all disputes over the interpretation and application of existing agreements.

When the railroads were returned to private ownership in 1920 a Railroad Labor Board was established, composed of nine members appointed by the President. This Board was to investigate all disputes and to publish its findings and recommendations. Compliance with its decisions, however, was not obligatory. The Railroad Labor Board was never popular with railroad labor, especially after the Pennsylvania Railroad was successful in ignoring the Board's decision that it should deal with the regular labor unions instead of its company union. When the case was appealed to the Supreme Court the court held that the act had provided for no stronger means of enforcement than public opinion.

The 1926 act reestablished mediation as the basic method of Government intervention. Although arbitration was not compulsory, having once been accepted, awards were binding. Supplementary to the central Board of Mediation were bipartisan boards of adjustment for single systems or groups of lines to interpret and apply agreements voluntarily entered into by carriers and employees.

Labor relations on the railroads at the present time are governed by the 1934 amendments to the 1926 act. These created a 3-man National Mediation Board, appointed by the President, and a National Railroad Adjustment Board, consisting of 18 carrier representatives and 18 union representatives. The Adjustment Board, with head-quarters in Chicago, is divided into four separate divisions, each of which has jurisdiction over a distinct class of employees, viz, train and yard service, shop craft, etc.

In this arrangement for the handling of labor relations on the rail-roads, a clear distinction is made with respect to the basic differences in the character of labor disputes; that is, those over the interpretation and application of existing agreements, and those over terms of a new agreement—wages, hours and working conditions, and questions concerning bargaining units and representation agencies.

The Adjustment Board handles disputes "growing out of grievances or out of the interpretation or application of agreements concerning rates of pay, rules, or working conditions." The decision of the Adjustment Board may be enforced by civil suits in Federal district courts. If the bipartisan board is unable to agree it must appoint a referee; if it cannot agree in a selection, the National Mediation Board appoints such referee.

The National Mediation Board takes care of the other two classes of disputes. Through holding elections or by other means it certifies who shall represent the workers in their collective bargaining. On request of either party to a dispute involving changes in pay, rules or

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working conditions, or on its own motion in cases of emergency, it intervenes and through mediation attempts to bring about an agreement. If its mediating efforts fail, the Board attempts to induce the parties to submit their controversy to arbitration, the arbitration board to be selected by the parties concerned. If they cannot agree on the selection, the Mediation Board is authorized to name the members of the board.

If arbitration is refused by either party, and the dispute should "threaten substantially to interrupt interstate commerce to a degree such as to deprive any section of the country of essential transportation service," the Board is required to notify the President, who may appoint an emergency board to investigate the facts and report thereon within 30 days. During this time no change, except by agreement, may be made by the parties to the controversy in the conditions out of which the dispute arose. While the law does not require compliance with the recommendations of the emergency board, the publication of the findings of fact of such a board makes it very difficult for either party not to follow its suggestions.

#### FEDERAL CONCILIATION SERVICE

The act passed in 1913, which created the United States Department of Labor, provided among other things: "\* \* that the Secretary of Labor shall have the power to act as mediator and to appoint commissioners of conciliation in labor disputes whenever in his judgment the interests of industrial peace may require it to be done \* \* \*." Under this provision the present United States Conciliation Service was established. This now has a staff of 60 commissioners actively engaged in efforts to settle questions in dispute before strikes and lock-outs occur, or to bring them to a speedy settlement if they have already started. The Conciliation Service may enter a case at the request of either party to the dispute, or at the request of some representative of the public—mayor, Governor, Congressman. It may also intervene upon its own motion, but this is done only in the more serious disputes when it is believed that a public interest is involved.

Although the original act gave power to mediate in any kind of dispute, the Conciliation Service has no power of coercion or means to enforce its recommendations. When the National Labor Relations Act was passed, giving to workers the legal right to organize and to bargain collectively with their employers, the enforcement of this act was turned over to the National Labor Relations Board which exercises quasi-judicial power. When requested, however, the Conciliation Service intervenes in union-recognition disputes to the extent of supervising consent elections to determine the collective-

bargaining agency. Thus the responsibilities of the two Federal agencies, the Department of Labor Conciliation Service and the National Labor Relations Board, are clearly distinguished between the judicial and enforcement function of deciding and maintaining rights under a given law, and conciliation or mediation which implies voluntarism and compromise.

The United States Conciliation Service is primarily concerned, not with the rights and mechanics of collective bargaining as such, but with the disputes which arise over the terms to be included in a collective agreement, or the interpretation and application of the provisions of the agreement after it is once made. Also, a conciliator may intervene in a dispute in an unorganized plant where the employees are seeking not collective-bargaining arrangements but only a settlement of a specific question of wages, hours, and working conditions. The Service is also frequently called upon to settle jurisdictional disputes, most of these being in the construction industry.

A Commissioner of Conciliation has no set formula of procedure when he is called in to help settle a dispute. Whenever possible he tries to get the parties concerned to discuss their differences in conference, in which case he acts as a conciliator. Frequently, especially during the early stages, either or both parties refuse to meet together. He then acts as a mediator, holding separate conferences with the respective sides, adjusting the minor points of misunderstandings or differences, and getting each to agree upon what major points can be or shall be further negotiated. If either or both sides still refuse to discuss together these major points, the commissioner may draft a plan of settlement independently and submit it to the parties as a recommendation, or he may obtain the approval of both sides to have the matter arbitrated, in which case he assists in making the plans and selecting the arbitrator. An increasing number of union agreements specify that the Conciliation Service act as arbitrator or select an arbitrator when disputes arise which cannot be adjusted by the parties concerned.

Whatever the exact procedure may be, only purely conciliatory methods are used. Acceptance of the commissioner's service is optional, and his recommendations may or may not be adopted. The results he obtains are dependent entirely upon the prestige of his office, the assistance he can render by reason of his knowledge of the facts involved in the dispute, his skill as a negotiator, and the willingness of the opposing parties to come to terms of agreement.

#### MARITIME LABOR BOARD

In pursuance to an amendment to the Merchant Marine Act, the President, in July 1938, appointed a 3-member Maritime Labor

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Board. One of the duties of this Board is to act as mediator upon request of either party in any dispute over the interpretation of an agreement or over the terms of a new agreement. If mediation services are unsuccessful, the Board is to use its best efforts to secure the assent of both parties to arbitration.

Since its establishment the Maritime Board has intervened in a number of disputes between shipping interests and maritime unions on the Pacific, Gulf, and Atlantic coasts. It has followed much the same procedure as the United States Conciliation Service. This Board, however, is temporary and will cease to function after limit unless legislative provision is made for its continuation.

#### STATE ARBITRATION AND CONCILIATION SERVICES

State machinery for the adjustment of labor disputes antedates Federal conciliation services, that in Massachusetts and New York, for instance, having been created as early as 1886. The concern of most State governments with employer-employee relations, however, has fluctuated with the increase and decline of labor disputes. In only a few States has there been any continuing, consistent program for the prevention and settlement of strikes and lockouts. More generally, when there has been a sharp rise in union activity and workers have shown a disposition to make known their discontent and desires, the State government has hastily passed legislation in an attempt to meet the situation. During periods when there have been few disputes, such legislation has been all but forgotten and many agencies which had been formed have become moribund through lack of interest and financial support.

Around the turn of the century, when strikes trebled in number, the majority of the States passed some kind of legislative provision for the mediation or arbitration of industrial disputes. Thirty years later most of these State agencies were inactive. Some States had repealed the laws entirely. In others the original, independent board was abolished but the duties were nominally turned over to another department in the State government.

With the recent increase in union activity and industrial disputes, many States again have interested themselves in employer-employee relations. Following the example of the Federal Government, most of the State legislation passed in 1935 and 1937 was concerned with defining more clearly labor's "rights" and providing means for the protection of those rights. Five States, for instance, passed State labor relations acts which more or less followed the pattern of the National Labor Relations Act. Many more passed anti-injunction

<sup>\*</sup> For a report on these State labor relations acts and elections held by the boards, see the February 1939 issue of the Monthly Labor Review.

laws similar to the Norris-LaGuardia Act, which restricts court injunctions in labor disputes and makes "yellow-dog" contracts unenforceable in Federal courts.

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Subsequent to the peak in strike activity in 1937, States which had passed protective legislation for labor, as well as others which had not already passed such legislation, turned their attention to ways and means for settling strikes and lockouts. Inactive conciliation services were revived and new mediation and arbitration boards created. At the present time the majority of the States have some kind of legislative provision for the handling of employer-employee disputes. Most of them have designated conciliation and arbitration agencies. In some, however, there is merely enabling legislation permitting the establishment of boards of conciliation and arbitration, but no such boards have been appointed.

When discussing State mediation agencies, the role of the Governor must not be ignored. With or without other formal State machinery, the Governor is likely to be called in whenever a serious labor dispute occurs. Sometimes his intervention follows a request by local officials for the assistance of the State militia "to maintain law and order." Always reluctant to take such a drastic step, the Governor will personally intervene or appoint a "Governor's committee" to attempt settlement. When a threatened stoppage of work clearly threatens the public interest, even though there is no request for calling the militia, the Governor frequently appoints a temporary committee to undertake settlement. Such intervention by the Governor is, necessarily, limited to the larger and more important disputes. Even though his services have proven valuable upon occasion, they do not take the place of a permanent, trained staff of conciliators.

#### Different Types of State Conciliation Agencies

There is a great deal of variation among the several State mediation agencies in their mechanical arrangements, legal powers, and the financial and moral support which is given them. The most common arrangement is for the conciliation service to be a part of the State labor department or industrial commission, the conciliators usually having other duties when not engaged in the work of settling disputes. A number of States have tripartite boards appointed by the Governor. While these may be permanent boards, the individual members in some instances serve only upon occasion and are paid on a per diem basis. In such cases the boards work in close cooperation with the regular labor department, usually being called to service upon its request. In only a few of the more important industrial States are

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there full-time 3-man conciliation and arbitration boards. Several States have no permanent machinery but provide that the labor department or the Governor shall appoint a conciliation committee as the occasion arises or when there is a particularly grave dispute.

A few State laws provide that the State agency may appoint city or county conciliation boards. So far as is known, no such local boards have ever been appointed. When parties to a dispute wish local persons to intervene, they seem to prefer to appoint their own private committee rather than have the State board appoint a committee for them.

The procedure in three States (New York, Massachusetts, and Pennsylvania) resembles the Federal arrangement by sharply differentiating disputes arising over questions of union organization and collective bargaining from those arising over questions of wages, hours, and working conditions. The former are handled by State labor relations boards with quasi-judicial powers, while the latter come under the State conciliation service. In four other States (Michigan, Wisconsin, Minnesota, and Utah) which have labor relations laws 6 there is no such distinction, and the same agency attempts to settle all kinds of disputes, those arising from unfair labor practices and questions over union organization as well as those over specific terms of employment such as wages and hours.

Voluntary submission of disputes.—A typical provision establishing a State conciliation service specifies: "The (name of agent or agency) shall do all in his power to promote the voluntary arbitration, mediation, and conciliation of disputes between employers and employees. It is his duty to endeavor to adjust disputes and, if necessary, to persuade the parties to submit their differences to a board of arbitration. He may appoint temporary boards of arbitration, prescribe rules of procedure for such boards, and conduct hearings and investigations."

Most generally the State agency intervenes only upon the request of one or both parties to the dispute, although a few of the laws specify that the agency shall on its own motion investigate disputes wherever "public interest is material." The Connecticut Board of Mediation and Conciliation is given power to enter any establishment to investigate conditions where a strike or lock-out exists; otherwise it intervenes only upon the request of one or both parties. The Massachusetts Board is required to undertake mediation whenever it learns of any dispute.

<sup>&</sup>lt;sup>6</sup> While the Michigan, Minnesota, Wisconsin, and Pennsylvania laws are commonly referred to as labor relations acts and specify certain unfair labor practices, they differ vitally from the National Labor Relations Act. The original State labor relations acts passed in 1937 in Wisconsin and Pennsylvania were very similar to the National Labor Relations Act, but these were materially altered in 1939.

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telavery Some of the laws require that a minimum number of persons, usually 10, shall be involved in a dispute before the State agency shall intervene. Others specify that there shall be State intervention only when asked by a designated number of private citizens, the local government officials, the employer, or a majority of the employees involved in the dispute.

A few laws specify that it is the duty of the parties to a dispute or threatened dispute to submit the matter to the State board for investigation. An early statute (1895) in Illinois, for instance, says executives of labor organizations shall notify the State agency of any strike or any threatened strike. When there is no penalty involved, such as prohibition of strikes or lock-outs until after the notification, such provisions can hardly be considered mandatory intervention.

Compulsory notification before stopping work.—Until very recently, Colorado was the only State which forbade strikes and lock-outs pending investigation and issuing of a report by the State Commission. During the past year three States have adopted legislation requiring notification to a State agency before stoppages of work may take place. The Wisconsin law provides for 10 days' notice before a strike may be called in the agricultural, dairy, and canning industries. Michigan requires 5 days' and Minnesota 10 days' notice before calling a strike against any employer, and 30 days' notice in businesses "affected with the public interest." When notice has been given to these State boards they are instructed to take immediate steps to effect settlement, the parties to the dispute being obliged to attend any conferences which the conciliator may call during the notification period. If mediation fails, the Board shall endeavor to have the parties submit the controversy to arbitration.

None of these State laws makes arbitration mandatory. A strike or lock-out may take place after the notification period if arbitration is not acceptable to one or both parties and they are unable to settle the controversy between themselves or with the assistance of the State conciliator.

Voluntary acceptance of recommendations.—Since the Kansas experiment, described previously, no State has attempted to compel the parties to a dispute to accept the recommendations of the conciliation agency unless the parties have agreed beforehand to abide by its determinations. In some instances, a degree of pressure is exerted by permitting or requiring the board to publish a written report with recommendations. The Washington law goes further by specifying that if conciliation fails and the parties refuse to arbitrate, the director of labor and industry shall request a sworn statement

<sup>&</sup>lt;sup>7</sup> There is one exception—a South Carolina statute which requires arbitration of street-railway disputes in cities between 30,000 and 50,000 population if either party requests.

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from each party of the facts in dispute and their reasons for not arbitrating, which statement shall be for public use. The Oregon and Massachusetts laws go still farther by providing that the State board shall prepare and publish its findings, placing the blame by designating which party is mainly responsible for the existence and continuance of the dispute.

Such provisions for the bringing of pressure of public opinion upon the situation are as far as any of the existing State laws have gone to compel acceptance of the recommendations made by their conciliation

agencies.

Compulsory acceptance of voluntary arbitration awards.- If the parties to a dispute voluntarily agree to have the State board act as arbitrator, then the law usually specifies that the awards shall be binding. After arbitration is once accepted, strikes and lock-outs are generally forbidden during the time of investigation and the board is usually given power to subpena books and records and to require desired persons to appear as witnesses. In practice it may be said that this subpena power is very seldom used, even in the States which have the greatest number of disputes and the most active arbitration agencies.

The law usually specifies that the board's decision and award shall be binding for 1 year, although some limit the enforcement to 3 months or 6 months, or until 30 days or 60 days after notice is given that the

party will not be bound by the terms.

#### Conciliation in Massachusetts and New York

While the laws in the several States define the enabling features of their conciliation and arbitration services, they do not measure the actual endeavors of the various State governments to prevent and settle employer-employee disputes. Some of the legislation is comparatively new and its effectiveness is yet unknown. Some has been on the statute books for a number of years, but for various reasons has not been utilized to a great extent.

Two States-Massachusetts and New York-have maintained conciliation agencies for over 50 years. While there has been no formal interruption in their activities, the character of the work has fluctuated from time to time, due to the amount of public interest and financial support and the type of personnel in charge. Recently both boards have been strengthened by additional legislation and financial

support.

Both Massachusetts and New York have State labor relations boards which hold elections to determine collective-bargaining representatives and handle questions of union recognition and unfair labor practices. The conciliation and arbitration boards, therefore, do not usually concern themselves with disputes over collective bargaining, r not

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although upon occasion they may help to adjust such controversies when both parties wish to avoid the formality and possible delay incident to the filing of charges and holding of hearings necessary when bringing cases to the labor relations boards. If conciliation is unsuccessful, the case is then referred to the labor relations board.

Massachusetts.—The Board of Conciliation and Arbitration, composed of three members appointed by the Governor, operates under a law which requires the mayors of cities and selectmen of the towns to notify the board of any existing or threatened strike or lock-out. It is also the duty of the employers and unions to give notice to the board before resorting to strikes or lock-outs. Upon notice from any source, the board is required to intervene and endeavor to obtain an amicable settlement. If conciliation is unsuccessful, the board attempts to persuade the parties to submit the controversy to arbitration. If they refuse arbitration, the board is required to hold open hearings, to which it may summon witnesses, and publish its findings. In this report the board is required to place blame or responsibility in order that the public may be informed as to the causes of the dispute and its continuance.

The Massachusetts board is unique in its willingness to serve as arbitrator. In general, Government agencies prefer to confine their activities to conciliation work. When conciliation fails they seek to persuade the parties in dispute to let the agency appoint an arbitration committee, or the neutral member of a 3-man arbitration committee. While the Massachusetts board assists the disputants in the selection of a private or local arbitration committee, if they so desire, the board itself frequently assumes the role of arbitrator. Many of the union agreements, particularly those in the shoe industry, specify the Massachusetts board as the arbitrator for any dispute occurring under the agreement. During recent years this board has handled almost as many arbitration as conciliation cases.

Application for arbitration to the Massachusetts board must be made in writing, accompanied by a promise to continue in business or at work until the decision of the board is made, if such decision is rendered within 3 weeks. If only one party to the dispute makes application, the board must hold a public hearing on the application; if both parties ask for arbitration, a public hearing is not mandatory although it may be held if the board considers it advisable. The board has the legal power to subpense witnesses to such hearings, but has not found it necessary to do so within recent years.

A second unique feature of the Massachusetts board is its employment of experts on a per diem basis. Other State boards occasionally make use of outside persons who are conversant with the industry or the particular problem in dispute. Usually, however, such persons serve on a voluntary basis or are paid by the parties in dispute.

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The Massachusetts board retains a number of experts who have been approved by both the employers and the unions but who are paid by the board. Many of these experts are former shoe workers or shoe superintendents, since a majority of the cases coming before the Massachusetts board deal with questions of piece prices for the various operations in shoe manufacturing. In such disputes the expert, after consulting with the union and employer representatives, decides on a price which he recommends to the board. The board usually adopts the expert's decision and issues it as a formal award. A number of the shoe centers have city-wide agreements, so that a piece-price award is applicable to all shoes of like grade within the city or district.

An arbitration award made by the Massachusetts board is automatically binding for 6 months unless both parties have stipulated a

longer period in their application for arbitration.

New York.—The Bureau of Mediation and Arbitration, which has been in existence many years, is now functioning as a unit of the State Board of Mediation which was established July 1, 1937. The latter is a five-man board, appointed by the Governor, which is enabled by law to intervene in any dispute upon request of either party or upon its own motion. While the board may subpena witnesses to a hearing when both parties have voluntarily agreed that such a hearing shall be held, the board by court ruling is not permitted to subpena the principals to a dispute. In practice the board has never exercised its power of legal compulsion, being of the opinion that it can operate much more effectively on a voluntary basis.

As in Massachusetts, most of the requests for intervention come from the unions. In New York about 30 percent come from the employers, and in about 10 percent of the cases the board enters upon

its own initiative.

Over 90 percent of the cases handled are from New York City. During the 2 years the present board has operated, only two employers and no unions have declined to cooperate after the board decided to enter into negotiations.

Unlike the Massachusetts board, the New York board does not usually act as arbitrator, although individual members of the board occasionally serve as arbitrators upon request. Believing that its work as a mediator, where no compulsion is used and no orders or instructions are issued, might be impaired if it acted also as arbitrator where a decision becomes binding upon all parties, the board has chosen another method of handling arbitration cases. It has selected a panel of about 75 outstanding public-spirited citizens who have accepted the board's invitation to act as arbitrator when designated by it in specific cases. These persons are not paid from State funds, as are the experts in Massachusetts, although the two parties to the

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dispute sometimes reimburse the arbitrator. An increasing number of union agreements, particularly in New York City, specify that the board shall appoint the arbitrator for disputes which cannot be settled through conciliation.

Most of the disputes which are referred to the board are over questions of general wages, overtime, vacation allowances, and seniority rights in lay-offs. In New York, as in Massachusetts, it is only the shoe unions which regularly ask for arbitration of individual piece rates. In other organized industries the board helps in the negotiations for general wages or minimum wages, but the employers and unions together work out the individual piece rates.

#### CITY CONCILIATION BOARDS

While it would seem that city governments would be as concerned as the State and Federal Governments in providing means for the prevention and settlement of industrial disputes, few cities in the United States have established any conciliation machinery. Probably one reason for the lack of formal arrangements is the tendency to rely upon the mayor, especially in disputes in the service and trade industries which are most likely to affect the comfort and convenience of the public. Other disputes, such as those in manufacturing, are more likely to be taken to higher Government agencies.

Although all mayors of necessity would intervene in disputes which were likely to interrupt the public services, some individual mayors have entered into the field of industrial relations much more than others. If both sides feel that a mayor is unbiased and concerned only with the public good, and if he is an astute mediator, a mayor is in a position to accomplish a great deal in the prevention and settlement of disputes. A public official who is dependent upon the popular vote, however, is somewhat reluctant to intervene in disputes when any decision which he might make may alienate certain portions of his constituency.

For this and other reasons, the mayor usually prefers to appoint a committee of private citizens instead of taking part in the negotiations himself. Several cities at the present time have continuing mayor's committees to which disputes may be referred. Others have been appointed, served for a short time, and then disbanded when the number of disputes declined. Some have been created with a distinctly partisan make-up and were, therefore, ineffective from the start.

Two cities, Toledo, Ohio, and Newark, N. J.,8 now maintain labor boards which can be considered a part of the regular municipal government. The members of these boards are private citizens

See p. 1045 for a detailed description of the operation of these two boards,

who serve without pay, an equal proportion representing employers, the union, and the public. In each case the city maintains the paid director and staff. The Toledo board has been in operation since the summer of 1935; the Newark board was established in the spring of 1937. They have handled hundreds of cases and have been effective both in the prevention and in the settlement of employer employee disputes.

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# MUNICIPAL LABOR BOARDS OF TOLEDO AND NEWARK

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By WILLIAM L. NUNN, University of Newark

ATTEMPTS by municipal officials to settle local labor controversies are not new. It is axiomatic that strikes are likely to result in a variety of contrary demands upon city halls, which cannot be ignored even if they cannot be granted. Plant owners want extra police protection for property and workers; unions want their picket lines to remain unmolested and sometimes even want assistance from public officials in closing down all plant operations. Any decision as to granting relief to strikers by public welfare agencies will please only one side to the controversy. Losses of pay rolls and purchasing power have repercussions throughout the entire business community and affect both directly and indirectly the attitudes and decisions made by city officials. Even where the mediation services of State departments of labor and of the United States Conciliation Service are available, the impact of these problems and demands on city governments can be parried only to a limited degree.

The wave of labor organization beginning with the rise of the price level and of industrial output in 1933 demanded that hard-pressed mediation agencies already in existence give attention only to the more serious strikes. Increasing amounts of time were spent by mayors, police chiefs, city managers, and others upon industrial problems. Here and there special panels of citizens were made up by municipal officials to serve as mediators of these disputes; extra personnel was added elsewhere to handle complaints and to assist in determination of city policy and sometimes to settle controversies.

No formal machinery of a permanent type, however, came into existence until the initiative was taken in Toledo, Ohio, by Edward F. McGrady, at that time Assistant Secretary of the United States Department of Labor. As early as June 1935, Mr. McGrady, who for months had been in and out of Toledo in connection with the wave of strike activity which was rapidly making Toledo a focal point in labor's campaign, took the initial steps which led to the creation of the Toledo Industrial Peace Board. The plan was based on the belief that when the proper machinery was at hand local communities could settle, and sometimes prevent, industrial strife.

The board, when completed, was composed of 18 members—5 selected by the Toledo Central Labor Union (A. F. of L.) to represent labor; 5 chosen by the Toledo Chamber of Commerce, to represent management; and 8 (including a Jewish rabbi, a Catholic monsignor, a merchant, 2 lawyers, 2 judges, and the county relief director)

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selected by Mr. Ralph A. Lind, director of the Eighth District Labor Relations Board of the NRA, to represent the public. Mr. Lind was requested by Mr. McGrady to assume the chairmanship of the board. The first director of the board was assigned by Mr. McGrady from the United States Department of Labor.

The success of the plan of settling local disputes by local men caused the city of Toledo, in an ordinance passed in April 1936, to take over in the name of the city the financial and administrative direction of the existing board. Mr. Edward Ruffin was named as the new director.

The Toledo plan received much publicity. It was generally conceded that the better relations between management and labor in 1936 in Toledo were due in no small measure to the activities of the director and his board. Among the several cities and towns which looked with interest on the reports from Toledo was Newark, N. J., center of one of the most diversified industrial areas in the country. Here the Toledo plan was studied carefully, a representative of the mayor was sent to Toledo to get first-hand information, and the plan was modified and adapted to meet the needs of the area.

The Newark ordinance, which was passed in April 1937, created a board of 10 persons with a paid director and staff. All the 10 board members were appointed by the mayor—3 to represent management, 3 to represent labor, and 4 (one of whom was to be elected by the

others as chairman) to represent the public.

These two boards have since their formation handled hundreds of cases. The Toledo board alone, during the period July 5, 1935, to December 1, 1938, assisted in the settlement of 212 disputes involving 35,735 employees. The Newark board, from October 1937 to July 1, 1939, handled 155 cases involving 8,956 workers.

Taken together, the activities of these boards are impressive. Strikes and the accompanying loss of pay rolls and extra cost to the community have either been prevented from occurring or have been settled if prevention has not been possible. The mere existence of a local agency known to all, which operates on a full-time basis, affords a means for a speedy solution to problems which otherwise would tend to be drawn out with accumulative harm and bitterness.

## Comparison of the Two Boards

Significant differences appear between the two boards. In Toledo, the ordinance merely accepted as a part of the municipal government an already existing agency. Consequently the board is bound by little other than its own rules and regulations. The Newark ordinance, however, is a lengthy document and prescribes rules and procedure in a fairly definite way. The Toledo board meets infrequently and its members serve the director whenever he desires their assistance.

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oledo, iment little iance, ure in ind its iance. by the following table.

In Newark, however, the board meets once a month for the purpose of receiving reports from the director and from the standing committees. It is a policy-making board and the director, in a real sense, is the executive of the board. That the range of the Newark board is considerably greater than that of the Toledo board is evident in its activities, involving arbitration, general research in industrial relations and standards of living, special industry studies, joint labor-management committees in special industries, etc. Representation on the Newark board includes both the American Federation of Labor and the Congress of Industrial Organizations; whereas labor representation on the Toledo board is limited to the American Federation of Labor. In other particulars, however, the boards are rather similar, as indicated

Item	Newark Labor Relations Board	Toledo Industrial Peace Board
Composition of board.	10 members— 3 representing labor (i A. F. of L.; 1 C. I. O.; 1 Newspaper Guild, which was A. F. of L. at time appointment was made). 3 representing management.	18 members— 5 representing labor (all from A. F. of L.). 5 representing management.
Method of appoint- ment and length of service.	4 representing public  Appointed directly by mayor with no provision for new members to be recommended for appointment by board.	8 representing public.  Appointed originally by Assistant Secretary of U. 8. Department of Labor. All members subsequently reappointed by mayor.
	Appointments of original members for 1, 2, and 3 years. Future appointments for 3 years.	Future appointments by mayor on recommendation of the board. No stated length of service.
Compensation of members.	None	None.
Meetings of board	Regularly, once a month 1 executive director, 1 assistant to director, 1 office	Infrequently, at call of director.  1 director, 1 senior stenographic
Place of board in city government.	secretary.  Board is division of department of public affairs, now under control of the mayor. Irrespective of which city commissioner controls the department, in the future board members will continue to be appointed, under the ordinance, by the mayor.	clerk. No specific placement of board in the ordinance. The board, however, acts as a department of the division of welfare. The director, "insofar as he reports to anyone," reports to the city
Purposes of the ordinance and of the board.	Ordinance provisions:  1. To foster and maintain industrial peace and harmonious relations between employees and employers.  2. To serve as an impartial medium between management and labor for adjustment of disputes.  3. To conduct round-table discussions of labor relations.  4. To secure discontinuance of wasteful practices by voluntary agreements between labor and management.  5. To assemble data in the field of labor relations; also data on available employment, supply of local labor, extent of unemployment, etc.  6. To invite cooperation with the court of chancery in matters of labor litigation.  7. When requested by both parties, to serve in the arbitration of labor disputes.	manager. Ordinance provisions:  1. To preserve and promote industrial harmony.  2. To assist the municipal government in maintenance of law and order.  3. To serve as an advisory body to the city; to make investigations and recommendations on mat ters affecting labor relations.  Not specifically covered by ordinance:  1. To mediate industrial disputes.  2. To assist in setting up arbitration machinery, with the condition that neither board members nor the director serve in such eapacity.
owers of the board.	"No power to compel anybody to do anything." Its power is limited to the prestige of the board and this is conditioned by the ability of the board to act speedily in an impartial manner in preventing and securing settlements of disputes.	Same as Newark board.

The C. I. O. was not in existence at the time of the formation of the Toledo board.

# Operations of the Toledo Board

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The two boards have enjoyed considerable success in the areas which they serve. As will be seen from table 2, the Toledo Industrial Peace Board from July 5, 1935, to December 1, 1938, participated in the settlement of 212 disputes involving a total of more than 35,000 em. ployees. Of these disputes, 37 were strikes and 1 was a lock-out, The others were settled before reaching the strike or lock-out stage. The reports of the director to the board indicate that the director has usually acted alone for the board, but that panels of board members were effectively used in some cases. No information is available as to the relative use of the board by C. I. O. and A. F. of L. unions. but it is obvious that, throughout the history of the board, C. I. O. unions, though without representation on the board, have brought cases to the director and have made use of the board in reaching agreements with employers.

Table 2.—Summary of Operations of Toledo Industrial Peace Board, July 5, 1935-Dec. 31, 1938

Total		1938		1937		1936		1935; July 5- Dec. 31	
Dis- putes	Em- ploy- ees in- volved	-	Em- ploy- ees in- volved	Dis- putes	Em- ploy- ees in- volved		Em- ploy- ees in- volved	Dis- putes	Em- ploy- ees in- volved
212	35, 735	74	12, 363	95	11,866	31	7, 672	12	3, 834
1 134 37 1	27, 852 5, 309 100	145 6	11, 241 367	3 66 14 1	7, 797 2, 450 100	4 16 12	5, 712 1, 760	47	3, 102
	Disputes	Disputes putes involved  212 35, 735  1 134 27, 852 5, 309 1 100	Disputes putes in putes putes volved 212 35,735 74  212 35,735 74  27,852 245 37 5,309 6	Disputes Ployees involved Disputes involved Disputes involved Disputes involved 212 35,735 74 12,363	Disputes es involved Disputes	Disputes involved Disputes Disputes involved Disputes Dis	Disputes involved Disputes inv	Employ-ees involved   Employ-ees involved   Disputes   Employ-ees involved   Disputes   Disputes	Total   1938   1937   1936   July December   1938   1937   1936   July Disputes   1937   1936   1936   July Disputes   1937   1936   1936   1936   1937   1936

<sup>1</sup> Includes 36 threatened strikes averted by settlement.

Includes 6 threatened strikes averted by settlement.
Includes 24 threatened strikes averted by settlement.
Includes 3 threatened strikes averted by settlement.
Nearly all of these were settled by the parties directly involved, without outside assistance.

## Operations of the Newark Board

In Newark, the board has been able to settle about 90 percent of the cases brought before it. The remaining 10 percent of the cases were referred to other agencies or became moot because of passage of time or chancery court action. In several of the trades, notably in the laundry, cleaning and dyeing, and trucking industries, a series of conferences was sponsored by the Newark board between unions and management for the purpose of reaching agreements on irksome practices which were causes of continuous conflict between employers and employees.

In numerous instances the collective agreements between management and unions have been clarified as a result of the activities of the Newark board. In addition, machinery for regular shop meetings of employees and employer is frequently agreed upon and placed in the contract at the insistence of the board. Likewise, arbitration machinery to function for the duration of the contract is agreed upon whenever possible and in a concise way is made a part of the contract. The advice of the director of the board is constantly being sought by employers and union officials on a wide variety of matters. Such activities cannot be evaluated in statistical terms but have demonstrated in intangible ways the success of the Newark board, as well as the Toledo board, in making for better industrial-relations policies.

The following table gives a statistical picture of the operations of the Newark board.

TABLE 3.—Cases Mediated by Newark Labor Relations Board, October 1937-July 1, 1939, by Industry, Kind of Organization, and Major Issue

and the second second	Disputes		Strikes				Disputes		Strikes	
Classification		Workers in-	Number	Workers in- volved	Classification		Workers in-	Number	Workers in-	
Industry					Organization					
Ill industries	106	3, 761	49	5, 195	All types	106	3, 761	49	5, 195	
Manufacturing: Iron and steel Nonferrous metals Machinery Chemicals Rubber	1 1 1	206 5 125 1 325	2 3 1	428 976 350	A. F. of L. C. I. O. Independent Unorganized  Major issue	28	1, 768 1, 688 227 78		3, 055 2, 140	
Leather Paper and printing Bakery products	1 2		2	190	All issues	106	3, 761	49	5, 195	
Beverages. Hats, caps, millinery. Children's clothing. Lumber	3 2	6 155 2 36 11	1	18	Wages and hours: Wage increase Wage decrease Hour increase Wage increase, hour de-	5	438 95 3	4 2	304	
Nonmanufacturing:					crease		30	5	599	
Transportation Trade: Retail	23	286	13	2, 232	Hour decrease	1 19	9	4	259	
Wholesale Domestic and personal	11	64	4	46	Recognition and wages Recognition, wages and	5	126	5	372	
service	29	938	9	52	hours. Discrimination.	5 40	906	9	2, 974	
Cleaning and dyeing Professional service	2	890 80	2	52	Closed shopOther:	3	132	1	6	
Building construction Miscellaneous	1		2	475 40	Jurisdiction		20 439	1	8	

1935; July 5-Dec. 31

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By MARGARET H. SCHOENFELD, Bureau of Labor Statistics

## Summary

LEGISLATION dealing with industrial relations, in democratically governed foreign countries, has been greatly extended in recent years. The object of the laws has been to place greater responsibility on the organized employer and employee groups for maintaining equitable working standards and settling industrial disputes without recourse to strikes and lock-outs. A notable illustration is the passage of legislation extending the terms of voluntary collective agreements negotiated by groups within particular industries to cover operations in a whole district or industry. Also, the governments of these countries are participating more directly than ever before in efforts to facilitate peaceful relations between employer and employee.

The present article deals with the machinery of this type established in several important industrial countries—Australia, Belgium, Canada, Denmark, France, Great Britain, Ireland, the Netherlands, New Zealand, Norway, and Sweden—and is based on reports from representatives of the United States Foreign Service, official publications of the countries concerned, and reports of the International Labor Office. The conditions described are those which were in existence

just prior to the outbreak of war in September 1939.

The laws and national procedure of these countries are here analyzed to show the obligations and rights of employers and employees and the degree to which the respective governments assist in maintaining industrial peace through the operation of either compulsory or voluntary machinery for settling disputes. For example, in Great Britain, Ireland, and the Netherlands the Government intervenes in industrial disputes only when its aid is solicited by one or both parties and after other means of settlement have failed, and its decisions are not enforceable at law. On the other hand, in Australia and New Zealand compulsory arbitration is a long-established practice; and in Denmark, France, and Norway compulsion has been applied occasionally in individual industries and in periods of special stress.

As labor has become more effective in determining working standards it has had new obligations placed upon it. In many countries unions are now registered or incorporated. Registration with the government is usually on a voluntary basis, the advantages to labor in registering being sufficient to make compulsion unnecessary. Such

<sup>1</sup> See note at end of article for list of consuls.

advantages range from the right to hold land to special benefits under the terms of arbitration awards.

The right of private employees to organize for trade purposes is now universal in the countries covered. This right was always recognized in a few countries but in others was won only after a prolonged struggle on the part of labor.

The legality of the strike is generally acknowledged; i. e., direct action is recognized in principle as a legitimate weapon of labor to obtain more favorable working conditions. However, to prevent stoppages of work in essential services and strikes or lock-outs that involve serious economic and social losses, a considerable volume of legislation has been enacted whereby strikes are forbidden entirely for certain groups or may be engaged in only after settlement of disputes has been attempted through recourse to existing machinery. Also it may be noted that many governments have found it necessary to increase the availability of conciliation and arbitration facilities to employers and employees. At present it is usual to find a special government body, generally within the labor department or responsible to its executive officer, attempting to compose differences between employers and employees either before an open breach occurs or as an impartial agency for settling a difference that has led to a stoppage.

In determining what form of legislation would be most satisfactory, and in the administration of existing statutes, the governments have looked to organized employers and employees for assistance. This encouraged the formation of employer and employee organizations and the federation of these respective bodies into central agencies authorized and qualified to represent their members, in order that each group might have a spokesman.

The legislation upon which this article is based is national in scope for all countries except Australia and Canada. In these two British Dominions, the legislation of the centralized Government applies only in cases affecting more than one State; the individual States have jurisdiction over internal affairs. It has therefore been necessary to refer to the provisions of the local as well as the national statutes in these two instances, in most cases excluding from discussion such nonindustrial States and Provinces as Northern Australia and Prince Edward Island.

## Right to Organize

Although the right of workers to organize for trade purposes now exists generally in the countries covered by this study, it was slow in being recognized in some countries. This right was obtained by one of three methods: (1) By natural or inherent right; (2) by constitutional guaranty; or (3) by legislative action.

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Natural or inherent right.—Under the philosophy of personal freedom accepted in Denmark, Norway, and Sweden, the right to organize was recognized early in the industrial development of these countries without specific action on the part of the Government.

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In Denmark, however, although the natural right to organize was recognized, the purposes of meetings were restricted and limitations were early placed on workers' associations by government regulations. They were prohibited in 1800, but were definitely recognized by the terms of the constitution in 1849.

In contrast, the right of combination to obtain better conditions of work was never disputed in Norway and no legislative obstacle was placed in the way of the trade-unions. In 1894, the workers brought pressure on the Storting to take a stand against dismissals resulting from trade-union activities, and that body adopted a resolution disapproving such dismissals and confirming the stand that organization is "the inviolable right of every citizen of the State."

The Swedish Constitution did not mention the right to organize. However, subsequent events and court decisions served to show clearly that the right was regarded as self-evident and a law was passed late in 1936, effective January 1, 1937, whereby the right of trade association and negotiation was given statutory recognition. White-collar workers were particularly desirous of having such a law in order to clarify their position.

Constitutional guaranty.—A guaranty of the right to organize was given in the original constitution of the Netherlands adopted in 1848. It was there stated that the right of inhabitants to association and assembly is recognized, and it was further provided that the law should regulate and limit the exercise of this right in the interest of the public peace. No distinction is made between trade-unions and societies organized for education, recreation, or other purposes in the Netherlands.

Legislative action.—In Great Britain and its Dominions the right to organize was granted to labor by the terms of special legislation which, in most cases, removed previous prohibitions against labor organization. In Belgium and France recognition was also granted by law following periods when organization for trade purposes was forbidden.

In Great Britain two laws nullified the original provisions of the criminal law with regard to association for trade purposes. The first of these was in 1871 when labor was declared not to be liable for joint action in restraint of trade. This law was followed in 1875 by an amendment to the criminal law removing the stigma of illegality from combinations of workers. It was not until 1906, however, that labor's immunity from legal action for conspiracy under criminal or civil law was finally established.

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In Australia and Canada, the States and Provinces have given labor organizations legal status. The various Australian States guaranteed the right to organize in their early labor laws: South Australia in 1876, New South Wales in 1881, Queensland and Victoria in 1886, Tasmania in 1889, and Western Australia in 1900 and 1902. Thus, workers in the several States had secured recognition of the organization principle before the Commonwealth was formed in 1901. In Canada the Dominion granted this right by the Trade Union Act, 1872, the provisions of which were practically identical with those of similar legislation in Great Britain. The Provinces did not adopt laws of this kind generally until 1937 and 1938, when labor legislation was greatly extended.

Originally the position of labor in Ireland was like that of British labor. The Combinations Act of 1800 forbade organization for trade purposes. This law was repealed in 1824, but it was not until 1871 that the right to organize was specifically recognized under the terms of the Trade Union Act. The Irish Constitution adopted in 1937 confirms the existence of the right to form unions.

New Zealand legalized unionism under the Trade Union Act of 1878.

In Belgium the right to organize was not fully recognized until 1921 when a law was passed establishing the principle of trade-union liberty. During the early history of the country all concerted action with the object of influencing working conditions was forbidden. In 1866, under the influence of changed conditions and in order to deal with existing organizations, certain sections of the Penal Code were repealed and combination was no longer illegal, but as noted it was not until 1921 that specific sanction for trade-unions was given by law.

Organization of workmen was forbidden in France by a law of 1791 and was punishable by imprisonment under the terms of the Napoleonic Code. A law of 1864 changed the situation by a declaration that organization was not an offense, but full recognition was not granted until 1884 by the Waldeck-Rousseau law. The position was finally clarified in 1927, at which time a section definitely permitting organization was placed in the Labor Code.

Thus, with relatively few exceptions, the workers of the countries here considered obtained the right to organize before the beginning of this century and in some instances before the middle of the last century.

#### POSITION OF PUBLIC EMPLOYEES

The differing degree to which public employees are permitted to form organizations is illustrated by a comparison of conditions in Great Britain and Sweden.

In Great Britain, notwithstanding that privately employed labor has complete freedom to organize, restrictions are placed on the right

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of public servants in this respect. By a law of 1919 police were for. bidden to join a labor association. As a substitute, the Police Act of that year provided for a state body, known as the "Police Federation," to deal with matters of welfare other than questions of discipline and promotion affecting individuals on the police staff. By the Trade Disputes and Trades Union Act of 1927, the Treasury was authorized to issue regulations prohibiting civil servants from joining organizations of which the primary purpose is to effect changes in working conditions and remuneration, unless the membership of such organization is confined entirely to persons employed by or under the Government. Organizations of civil servants were also required to sever affiliation with the Trades Union Congress, the Labor Party, or any other labor organization of noncivil-service membership, and to forego political objectives. British labor has been working for many years for the restoration of the right of civil-service unions to affiliate with the Trades Union Congress, and sent a deputation to the Prime Minister early in 1939 to urge an amendment to the existing law.

In contrast, the Swedish law of September 11, 1936, effective January 1, 1937, granted to public employees, as well as others, statutory recognition of the right to organize. This right, as already stated, has always been considered basic, but the legislation was enacted in response to a desire of white-collar workers to have specific legal recognition of their right to join unions. Organization is legalized for all employees except government and municipal employees in positions

of official responsibility.

## Employer and Employee Organization

Recently, in practically all countries, membership of employer and employee organizations has been increasing, following the losses in membership after a period of economic depression. The growth in union membership in countries—New Zealand, for example—where the labor program has been appreciably extended, has brought the total for organized employees to a level far above that of any previous Except where there has been a definite policy of encouraging a special type of union, craft and industrial organizations exist within the same country. In certain countries employers and employees are organized along social or political lines following longestablished practice. Another notable development is the movement toward federation of employer and of worker bodies. Centralization of power in a single national bargaining agency for country-wide negotiations has been encouraged under recent labor legislation, as governments often require consultants from both partners in industry, and it is necessary for them to designate representatives to sit on certain commissions and boards to represent employer and worker views.

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In the absence of comprehensive membership statistics of employer and employee organizations no inclusive statistical analysis is possible. However, the scattered information available indicates that a material growth occurred in the number of trade-unionists during the years from 1935 to 1938. Even so, membership totals do not approach in many countries the totals registered in the post-war period of expansion in the 1920's.

Trade-union rolls in France accounted for 5,000,000 workers in the spring of 1937 after the program of the Popular Front was under way, as compared with 1,000,000 a year earlier. When the Labor Government came into office in New Zealand, the trade-union membership was estimated to be over 80,000, as compared with over 200,000 at the end of 1937-2 years later. The Irish Trade Union Congress reported a membership of 204,479 in 1937, and it was estimated that the total had increased 85 percent in 5 years. Evidences of a less spectacular, but steady, growth appear in the trade-union statistics of Great Britain and Northern Ireland where enrollment increased gradually from 4,868,000 in 1935 to 6,054,000 in 1938, and in Sweden where the Confederation of Trade Unions reported 701,186 members in 1935, 757,376 in 1936, and 905,723 in 1938. The highest membership recorded in Great Britain was 8,346,000 in 1920. In contrast, the Netherlands statistics showed a reduction in membership in the principal labor organizations, both for 1936 as compared with 1935 and for 1937 as compared with 1936. In that country the peak of enrollment in the two largest labor organizations occurred in 1933. Trade-unionists in Canada at the close of 1937 numbered 384,619, an increase of 62,146 over 1936. In Norway the membership has been increasing for some years, and in the period January 1, 1938, to January 1, 1939, rose from 323,156 to 340,031.

#### TYPES OF ORGANIZATION

In Canada, where a large number of trade-unionists are members of organizations affiliated with the American Federation of Labor, craft unions are relatively more important than industrial organizations. In Belgium, industrial unions have recently tended to displace craft unions. British, Dutch, and French workers' organizations are divided between craft and industrial unions; the kind of organization is determined by conditions in particular industries and localities. No pressure has been exerted to favor one type of union over another, and both function side by side. Trade-union organization in Ireland has developed much as in Great Britain, and the structure is on the same pattern.

The arbitration courts in Australia and New Zealand recognize the existence of industrial and craft unions equally in establishing awards

governing working conditions. By recent amendments the arbitration laws were clarified to permit the interpretation of "industry" to include any calling, service, employment, handicraft, or the occupation of workers.

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Industrial unions have been encouraged in Scandinavia in various ways. In Sweden, for example, a special commission appointed to plan reorganization of the trade-union structure recommended the industrial over the craft union in 1912, and as a result unionism has grown more rapidly on an industrial than on a craft basis. In Norway the Trade Union Congress decided in 1923 on a change from craft to industrial unionism.

#### FEDERATIONS

In order to enlarge their effectiveness, many craft and industrial unions combine in federations. These federations in turn are members of one or more national confederations which represent varying proportions of organized labor in the countries here considered. Political adherence and religious belief are important in determining the affiliation in several countries.

Belgium, France, and the Netherlands have federations of unions in which membership is determined by the political and religious adherence of the member groups. Although federations of labor unions exist in Scandinavia, the majority of the workers are organized without political or religious considerations and only minority groups, including Christian and Syndicalist organizations, have their special federations. Canada has not only federations of workers belonging to different religions, but also a large segment of its workers are affiliated with the American Federation of Labor. In the other Dominions and in Great Britain the unions and federations are, on the whole, free of political or religious influence.

The number of employer as well as employee confederations, formed to represent their respective points of view on a national scale, is increasing. Some of the central bodies have only recently been organized, as in New Zealand where the first annual meeting of the federation of labor was called in 1938. In Ireland the Federated Employers, Ltd., was established in 1937 to protect the mutual interests of employers. In certain other countries the powers of the central bodies have been greatly extended in recent years. For example, in France at the time the Matignon agreements were signed in June 1936, the General Confederation of French Employers was named as the sole bargaining agency for employers and the General Confederation of Labor for employees. The British Trades Union Congress does not have the extensive jurisdiction over labor that is granted to central bodies in certain countries, but acts as a coordinating agency. Employer organizations in England are numerous and active in negotiating agreements with large groups of employees.

## Legal Status of Trade-Unions

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Formal registration of trade-unions with a designated governmental agency is customary in the several countries, but registration is optional in most cases. There is considerable variation in the character of the information that the unions must report in order to become registered organizations. There is likewise great variation in the methods by which legal personality is bestowed on trade-unions.

## Registration

In Great Britain and the Dominions registration of unions is not required but is sufficiently advantageous to make compliance with this formality quite extensive. For example, in Great Britain a registered union is obliged to file annual reports with the Registrar of Friendly Societies on membership, finances, and other details; but, by reason of registration, a union is free from liability for damages resulting from acts of its officers or agents in labor disputes, it may hold land, enjoy remedies against fraud, may sue and be sued, and is exempt from income taxes. In Australia and New Zealand, registration is also voluntary, but no union may benefit from an industrial award unless it has registered. This provision is naturally important in influencing unions to register, and in effect makes registration compulsory. In addition, the several States of the Commonwealth of Australia have laws on registration. Most Canadian unions have not registered voluntarily as provided for by the national labor law, but some relatively recent provincial legislation makes registration compulsory.

Labor organizations in the Netherlands have the option of registering either (1) for indeterminate periods or for periods of 30 years or over, in either case an act of Parliament being necessary, or (2) for shorter periods in which instance a decree of the Crown is sufficient. As the decree of the Crown is readily obtainable, registration for the shorter period is usual. Unions that are not registered may not take civil action and their property is deemed by the courts to belong to persons signing contracts.

The position of labor unions in Denmark, Norway, and Sweden is somewhat different from that found elsewhere. In Scandinavia recognition of the legal existence of an organization is not conditional upon the observance of certain formalities. Nevertheless all Danish organizations of labor are incorporated bodies. In Norway there is no public supervision of unions, but they must supply any information that may be required by the State conciliator, and must register. Swedish unions are not obliged to register, to account for funds, or to submit to Government supervision of elections, and are not subject to any form of Government regulation.

In Belgium workers are required to communicate the rules of their organizations to the authorities but registration is optional. In France, unions must register their bylaws, and the Labor Code provides that unions possess civil personality, may be sued, and may acquire real or personal property.

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Some governments have adopted regulations whereby trade-unions may be deregistered for good and sufficient cause. Registration of a union in Australia was recently withdrawn for giving illegal aid to a strike. The court of conciliation and arbitration held that a registered union, after having accepted arbitration and having secured an award, was not free to aid a strike for claims refused by the court after judicial inquiry.

#### LEGAL PERSONALITY

Trade-unions in the countries covered by this article are endowed with legal personality in different ways. There is a group of countries where the mere fact of creation of the union gives legal personality; another where registration confers this status; and in other instances legal personality is taken for granted.

Regardless of the basis for legal personality, unions do not have equal liability in all countries nor have they the same rights. As already stated, registered unions in Great Britain are not liable for damages resulting from acts of their officers or agents in labor disputes. According to a study by the International Labor Office, unions in Belgium and France having legal personality are responsible under civil law to the full extent of their property. Independent of any liability arising from the legal personality of organizations, the Swedish law governing collective agreements stipulates the legal consequences of collective agreements and the responsibility of the parties for their observance.

#### Government Encouragement to Union Membership

Of the 11 countries surveyed, 1 has made union membership compulsory for a large portion of the working population. This is New Zealand where, under the arbitration law as amended in 1936, it is unlawful for employers in industries covered by awards or collective agreements to employ adult workers of 18 years of age and over who are not members of unions. Among the exceptions made is one allowing employers to hire nonunionists if union workers cannot be obtained.

Union membership is indirectly encouraged in the remaining countries in a number of ways. Some laws provide that, other factors being equal, organized workers will be given preference. A number of governments subsidize trade-union benefit funds. In several countries collective agreements affecting part of the workers in an industry are made binding on groups which have not participated in the negotia-

tions. Finally, the principle of the closed shop is recognized in various branches of industry.

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#### UNION PREFERENCE

Australia incorporated a provision, in legislation adopted in 1927, whereby, other things being equal, union labor may be given preference in employment. Within these limits the court of arbitration may grant preference to unionists in its awards. In practice, the court has been reluctant to exercise this power. A subsequent law of 1928-29, covering working conditions in the transport industry, provides for priority to trade-unionists in filling jobs.

The several Australian States follow various policies with respect to preference. The New South Wales law is framed in the same way as that of the Commonwealth, permitting the court to prescribe employment of union members, other things being equal. In South Australia, however, the industrial court is forbidden to order that preference be given in any circumstances to union members or nonmembers. Awards in Queensland vary in this respect, some providing for open and others for closed shops. If union preference is specified in an industrial agreement or award, employment of nonunionists is illegal. Preference is granted in every case subject to the conditions approved by the court of arbitration of the State.

#### AID TO UNIONS

Voluntary trade-union unemployment funds receive Government subsidy in Belgium, Denmark, France, the Netherlands, Norway, and Sweden. In thus rendering financial assistance to organized labor the Governments indirectly encourage workers to join unions.

Expansion of trade-union membership is also encouraged by the policy, adopted in many countries, of legalizing collective agreements entered into by representative or majority groups in an industry and making their terms compulsory upon all persons in the industry or in a particular region. This has been done in various States of Australia and Provinces of Canada, Belgium, France, Great Britain, Ireland, the Netherlands, and New Zealand. Under this system it would seem that employers as well as employees would be inclined to enter the organizations negotiating agreements if they are to be blanketed under the terms established.

#### CLOSED SHOP

Industrial agreements negotiated by employers and employees often make provision for the employment of union workers only. Although closed-shop agreements are made in most countries here discussed, they usually exist only in a restricted number of industries. The extent to which closed-shop contracts are negotiated depends

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upon individual union strength, employer-employee relations, and public reaction to the principle. For example, the British Government has taken no position regarding labor's obligation to join or not to join unions, but, under collective agreements, union membership is a prerequisite for employment in establishments as dissimilar as the Yorkshire dyeing trade and the Cooperative Wholesale Society.

## Legalization and Extension of Agreements and Awards

Australia and New Zealand.—Although the arbitration law of the Commonwealth of Australia authorizes the Court of Conciliation and Arbitration (section 38 (f)) to declare its awards binding upon all branches of a given industry, the High Court has held that this section is unconstitutional. Nevertheless, in disputes settled by award there have been cases in which an entire industry, being involved in a dispute, was subject to the terms of an award and was therefore brought under a common rule.

However, the majority of the Australian States may, under their

laws, extend agreements and awards to entire industries.

In Queensland the terms of a collective agreement or award may be declared binding upon all employers and employees (whether or not members of an industrial union) engaged in the same industry

within the locality specified.

In South Australia, the law provides that an agreement entered into by at least three-fifths of the employers and of the employees in an industry may be confirmed by the court of arbitration and applied to the entire industry (nonmembers of organizations included). An award made by the court and not by agreement may also be made the common rule for the industry. About 90 percent of the requests for extension of the terms of agreements and awards come from trade-unions. However, employers sometimes seek a common-rule declaration because they are handicapped by competition with firms not subject to the award.

In Western Australia an award is a general rule unless otherwise stated; and the court may make a voluntary collective agreement

applicable to an industry.

In New South Wales awards of the court are binding on persons working in the same branch of industry and in the same district.

In New Zealand, the only other country having a national wage-fixing system under a court of arbitration, agreements affecting the majority of workers in an industry may be made binding on all employers in the industry whether or not they are parties to the agreement. Awards, when filed, are binding on all the parties concerned and apply not only to all the employers specified in the award but also to all employers subsequently commencing business in the district.

Canada.—In Canada, extension of working standards beyond the scope of the original agreement is legalized by the terms of recent legislation adopted by several Provinces. The minister of labor in Alberta may declare a collective agreement binding upon every employer and employee in the industry and zone. In Ontario the lieutenant-governor in council may extend an agreement if the minister of labor is satisfied that it has been adopted by a proper and sufficient proportion of the employers and employees and recommends such action. If these conditions are met it then becomes binding for the entire industry within the Province. The law of Saskatchewan is modeled on those of Alberta and Ontario. In Quebec a voluntary collective agreement negotiated in a trade may be declared binding for all persons engaged in the same kind of work in the district.

Belgium.—The Government of Belgium was empowered to issue a Royal Order to extend to an entire industry, and to make binding upon all concerned, the provisions of an agreement made by the appropriate joint commissions and providing for a shorter working week. This power was granted by a law of 1936 providing for a progressive reduction of the working week to 40 hours. Although bills have been considered whereby wages established for special groups could be

made a common rule, no law has yet been adopted.

France.—France provided for extending the scope of collective agreements in 1936. The terms of agreements voluntarily entered into by employers and employees may be legalized, for all employees engaged in the same industry or trade, by the Government. taking such action the Minister of Labor must consult the National Economic Council and allow trade associations to be heard. declaring agreements a common rule it is presupposed that they have been concluded by the most representative bodies of employers and employees.

Great Britain.—The same principle is applied in one industry in Great Britain, namely cotton weaving. Both employers and workers recognized the need for maintaining standards during the recent depression and supported the enactment of the Cotton Manufacturing (Wage Agreement) Act of 1934. This law provides for general application in this industry of the wage rates established by collective

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Ireland.—A registered collective agreement in Ireland is binding upon all persons engaged in the form of industrial work, and in the area to which the agreement relates. This provision applies only to agreements covering industrial workers and excludes agriculture, domestic employment, mining, and transport. The Minister of Industry and Commerce may authorize exclusion of certain types of industrial work. Only such agreements as the Minister believes are negotiated by representative groups of employers and employees are

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The Netherlands.—Special legislation enacted in the Netherlands in October 1937 provides for the extension of collective agreements to entire industries. Under this law the Government is empowered to declare a collective agreement the common rule for an entire industry, if the agreement has been entered into by a majority of the workers employed in the industry.

## Legality of Strikes

Strikes and lock-outs are recognized as legal in the democratic countries but exercise of the right of direct action is often restricted in various ways.

#### CLASSES FORBIDDEN TO STRIKE

Great Britain is among those countries which forbid strikes of workers engaged in essential industries and in the public service. In addition, it is illegal for employees to carry on strikes that threaten the public interest. Specifically, strikes are lawful when designed to further a dispute within the industry to which the workers are attached.

In Ireland employees of the gas and water industry, and those engaged in the 11 industries having joint industrial councils for settling disputes, may not strike. In the Netherlands, strikes are forbidden for railway and public employees and in Norway such a prohibition

applies to State or local-authority employees.

Government employees in Belgium have unusual freedom in the use of the right to strike. When complete freedom to organize was granted to Belgian labor in 1921, the question was raised as to whether this implied complete freedom to strike. Following a serious stoppage in 1923, involving postal, telegraph and telephone, railway, and marine workers, penal sanctions were waived and in this way the right of at least certain classes of Government workers to strike was recognized. However, higher Government officials may be punished for insubordination under the Penal Code and this provision of the code may be invoked against such public employees for striking.

Strikes of French civil servants are neither forbidden nor recognized as legal. Repeated efforts to secure legislation regulating their right to strike have failed. The Government deals with cases as they arise and sometimes takes or threatens punitive action against strikers in the public service. The general strike of November 1938 is a case in point. Organized labor stated that this stoppage was intended as a protest against decree-laws imposing less favorable terms of employment than those existing under the Popular Front Government. Public, semipublic, and private employees received the strike call for

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November 30. The French Government held that the purposes of the strike were political and therefore illegal. It invoked the special emergency powers provided by the law of July 11, 1938, permitting workers to be requisitioned in time of national crisis. (Legislation of this type was originally enacted in 1877.) In this way semipublic services, such as transport, were maintained. At the same time Government employees who failed to report for work were threatened with discharge. When the strike was over, punitive action was kept at a minimum.

Both Australia and New Zealand outlaw strikes for persons covered by existing awards or agreements. In addition to the Commonwealth law, the labor legislation of all but one State in Australia limits the right to strike. In Queensland a strike must be authorized by vote of all members of the union affected or by referendum held by the registrar if the trade is unorganized. New South Wales forbids a strike of Crown or city employees and those wholly or partially regulated by court awards. South Australia unqualifiedly bans strikes under its arbitration law. In Western Australia a reasonable time must be allowed to elapse for reference of a case to the court before a strike may take place. Of the two States where wage boards of employers and employees establish working conditions, Tasmania forbids strikes in industries for which a wage determination is in effect and in Victoria the governor-in-council may suspend a determination for not to exceed 12 months, when a stoppage is impending, in this way legalizing the strike.

The Danish arbitration law of 1938, providing for the continuance and negotiation of collective agreements, forbids strikes and lock-outs for the duration of agreements. Similar provision is made in the laws of Norway and Sweden. Both of these latter countries have special labor courts to interpret the clauses of collective contracts and determine their validity, when controversy arises as to their meaning. No appeal is permitted from the determinations of the labor courts in such cases and no employer or employee may resort to direct action pending a decision. Late in 1938 representatives of organized employers and employees drafted a basic agreement in Sweden, known as the "Saltsjöbaden agreement," which if accepted by industry as a whole will postpone the calling of strikes, upon expiration of collective agreements, when disagreement exists. Under its terms parties to a dispute must try to reach a settlement and, if they fail, must obtain approval from their trade federations before striking. agreement also forbids strikes against neutral third parties and society.

#### POSTPONEMENT OF STRIKE ACTION

The New Zealand law goes beyond prohibiting strikes of persons covered by awards or agreements, in providing that persons not so

covered must give formal notice of their intention to strike and must

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observe a waiting period.

In Canada, under a law adopted in 1907, strikes are illegal in the coal industry and by labor engaged in public utilities, including rail-roads, until the conciliation board has rendered a finding of fact on the dispute. Most Canadian Provinces have also enacted laws requiring a waiting period. The conciliation and arbitration laws of British Columbia (1937) and Alberta (1938) forbid stoppages of work during the period intervening between an application for conciliation in a dispute and 14 days after the date fixed for voting on an arbitral award. The Manitoba, New Brunswick, Nova Scotia, Quebec, and Saskatchewan laws also require delay in striking until cases have been considered by the special bodies established to settle disputes.

Under French law, no strike may be called before a case is submitted to the proper authorities for settlement. This provision of the legislation was upheld by a Paris court of the first instance, which in 1939 ruled that a strike without previous attempt to settle the difference in the prescribed manner, or involving occupation of a factory, is illegal, and that those responsible for the strike are liable for damage

caused by it.

#### Machinery for Settling Labor Disputes

Although most governments encourage employers and employees to settle their differences by means of the special machinery they may have established within industry, there is a growing tendency to provide public bodies for conciliation and arbitration to which disputants may submit their differences if they are unable to reach an agreement. These services are usually available on the application of

one or both of the parties to a dispute.

In the United States the term arbitration is sharply distinguished from conciliation. By arbitration is meant the procedure of hearing and finally determining a controversy; by conciliation and mediation (no distinction being made between the two terms) is meant the effort of neutral parties to obtain the settlement of a dispute, without any authority on the part of the conciliator or mediator to impose a settlement. However, in certain countries covered by this survey, the term arbitration is used where there is an element of compulsion to submit a case to an impartial agency for an opinion but no compulsion to accept the findings unless this is agreed upon in advance by the disputants. Also, in some cases, the individual or agency is called an arbitrator, who interprets the terms of collective agreements in disputes arising as to their meaning.

In the following discussion the terminology of the respective countries is used and reliance is placed on the description of the procedure to show which are arbitration systems in the strict sense of the term. Countries are grouped by points of likeness in the machinery provided.

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Australia.—In Commonwealth of Australia cases, i. e., those affecting workers in more than one State, the law provides that the Court of Conciliation and Arbitration of Australia may make an award in one of three ways and, regardless of the means of arriving at a particular schedule of working conditions, it is equally binding upon the parties covered: (1) If employers and employees adopt a collective agreement voluntarily the court may declare it binding upon them; (2) if a case comes up for settlement the court may, in its discretion, appoint a conciliation committee consisting of equal employer and employee representation and a chairman, and endorse its determination when made; and (3) if a case remains unsettled after either of these procedures has been followed, or is heard by the court in the first instance, the determination of the court is binding. However, the High Court of the Commonwealth has held that the second procedure prescribed under the act is unconstitutional.

In a case proved to have an interstate character, appeal may be made to the regular courts. Although the court may summon parties to a dispute who are not covered by an award, in order to conciliate their differences informally, it may initiate arbitration proceedings only upon request of an organization, a registrar, a State industrial authority, or a judge who has negotiated in an effort to conciliate a case. However, when cases arise in industries already covered by an award, any party to the award may request the court to make a decision.

In addition to the Commonwealth machinery for settling disputes, Queensland, New South Wales, South Australia, and Western Australia have their own systems for handling cases of an intrastate character. They follow much the same procedure as the Commonwealth, with minor differences in the composition of the respective State bodies. Under the wages-boards system operative in Tasmania, determinations of these boards remain in force until amended either by the board or by the court of industrial appeals or unless suspended by the governor-in-council. Determinations of Victoria's wages boards may be appealed to a special court.

New Zealand.—The New Zealand law provides for councils of conciliation before which registered unions and employers may discuss their differences informally. Membership in a council consists of a commissioner (of whom there are two in the country, one for the North and the other for the South) and representatives of both sides. If the council fails to bring about an agreement between the parties it may make a recommendation. If a settlement is reached by either procedure the terms have the force of an award of the court of arbitration on approval by that body. Failing settlement by the council, a case is submitted direct to the court. The personnel of the court of

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arbitration consists of a judge, acting as chairman, and assessors representing employers and employees. All awards made by the court are binding on both parties. Persons who do not belong to registered unions may submit their cases to conciliation councils for friendly adjustment, but there is no penalty if agreement is not reached.

France and Norway.-France enacted a temporary arbitration law at the end of 1936, which is still operative in a modified form. On March 4, 1938, new legislation was adopted in order to speed up the process of settling disputes, making provision for opening cases when the cost of living rises, and establishing a High Court of Arbitration to handle cases that are appealed. The law provides for settling disputes in industries organized in such a way as to make it possible to establish their own machinery under collective agreements, and also in those industries lacking the facilities for establishing the necessary bodies. Conciliation or arbitration is mandatory in every instance. but industries with their own machinery may settle disputes without submitting them to Government bodies. Every dispute must be settled within 1 month and no one phase of the procedure may require over 8 days. Final decisions are binding and awards must be enforced pending an appeal. A decree of November 12, 1938, established penalties for failure to comply with the terms of arbitration awards.

In industries operating under collective agreements, cases may be submitted to specially organized conciliation commissions, if not settled at the expiration of the time fixed by the agreement. The commission presided over by the prefect or his representative hears the case, submitted by either party to a dispute or the prefect, and if agreement fails transmits to the arbitrators a statement covering the subject of the dispute and the points to be acted on. Two stages of arbitration are permitted: The case is heard by two arbitrators chosen by the respective parties; and then, if settlement fails, it goes to an umpire. The umpire is chosen by the two parties to the dispute or, if they cannot agree, by the prefect or competent minister. Cases appealed within 8 days of an award are heard by the High Court of

Arbitration, whose decisions are final.

For those industries which have no machinery for settling differences the law prescribes a different procedure. Both Department and national conciliation machinery is established to take care of disputes of local or national scope, respectively. Depending upon the scope of a dispute, it is subject to review by the departmental or the national body. Recourse is taken to this machinery if disputants cannot reach a settlement. Either disputant may then appeal to the prefect to refer a case to conciliators, the prefect determining the appropriate conciliation agency. A departmental commission has equal numbers of employer and employee representatives and is presided over by the prefect or his representative, with the divisional

inspector of labor acting in a consultative capacity. Each national commission is presided over by the competent minister or his representative and has equal numbers of employer and employee representatives. If a commission brings about an agreement, a signed statement is sent to the Minister of Labor. If agreement fails, a report outlining the differences is submitted. Within 2 days the parties must then nominate a single arbitrator or one for each side. When these fail to bring about a settlement the parties must name an umpire to make the final decision. No interruption is permitted in these deliberations pending reference of a case to the High Court of Arbitration to determine the competency of a commission.

Norway adopted compulsory arbitration for limited periods by laws enacted in 1916, 1922, and 1927. However, the principle was opposed by employers and workers and a bill embodying the compulsory principle introduced in 1929 was defeated by their combined efforts. In spite of this opposition a new compulsory arbitration law was passed in 1938 to settle two disputes in which it had not been possible to secure a voluntary settlement. It provided for establishment of an ad hoc board to deal with disputes in the fish-marketing and transport industries, respectively, and did not establish arbitration for industry generally. The court created had five members, of whom two represented the Confederation of Trade Unions and two the Employers' Federation. The Norwegian Government again resorted to compulsory arbitration in November 1938 to settle a dispute in the forestry industry. This action was authorized by the Cabinet Council and the resolution issued was essentially the same as the ad hoc act adopted earlier in the year.

A special court, known as the Labor Court, was established under legislation adopted in 1915 and amended in 1927. This court is composed of seven members and has jurisdiction in cases brought by either party to a dispute, involving a breach of a collective agreement or an unlawful stoppage of work, and no appeal is allowed from its decisions with the exception of a few cases that may be appealed to the Supreme Court. Employers and employees having private arbitration machinery may be excluded from the jurisdiction of the court by agreement. Membership of the court consists of two representatives each of employers and employees, three neutrals, and two substitutes for each member.

The same laws provide for maintaining a permanent conciliator appointed by the Crown and similar officials for each district in Norway. Conciliation boards, consisting of one of these officials and an employer and an employee representative, are maintained in each district. Parties that are not subject to hearing before the Labor Court are required to attempt to conciliate their differences, and the conciliator or either party may initiate proceedings.

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Denmark and Sweden .- Owing to the failure of Danish employers and employees to settle their differences on several occasions in recent years, when the annual collective agreements expired, the Government enacted a number of temporary laws to insure continuance of industrial operations. In 1933 strikes and lock-outs were forbidden for 1 year; in 1934 the voting system of labor unions was changed, as a check on decisions that would induce strikes; in 1936 compulsory arbitration was imposed for 1 year; and in 1937 and 1938 the settlements proposed by the public arbitrator, whose function is to frame a proposal acceptable to both parties, were enacted into law. Although the Government declared itself averse to imposing a settlement, it stated that the extensive labor conflicts would otherwise seriously endanger the country's economic situation. The law of April 9, 1938, provides that the collective agreements legalized under its terms shall continue in force for 2 years, subject to changes in wages in accordance with fluctuations in the cost of living. Any complaints of violations arising under the law may, upon request of either party, be heard under the rules of the Permanent Arbitration Court described below.

A dispute in the newspaper printing industry, which threatened to result in a strike in March 1939, was settled by a vote of the legislature in a manner similar to that followed in 1938. It was voted to make the public arbitrator's decision legally binding on the parties and to prohibit lock-outs and strikes for the period covered by the arbitrator's proposal.

The Permanent Arbitration Court, or Central Labor Court, is empowered to act in cases involving breaches of collective agreements and is competent to decide as to the legality of strikes in violation of collective agreements, arbitration awards, and previous decisions of the court itself. Either party to a dispute may submit a case. The court is not a court of appeal from the awards of arbitration boards established in industry. Membership of the court consists of 6 members and 16 substitutes, appointed in equal numbers from employer and employee trade associations. The procedure is to attempt to conciliate but, if this fails, judgments are made which are final and enforceable in the same manner as the judgments rendered by the regular judicial tribunals.

Most collective agreements in force in Denmark provide for conciliation under a voluntary system introduced in 1908. The procedure is to submit disputes to permanent conciliation committees of which there is one for each industry. If the appropriate committee fails to bring about an agreement, the case is referred back to the parties for further negotiation. If they fail to reach a settlement, either party has the right to demand that the case be submitted to an industrial arbitration court having equal numbers of employer and employee

members, and a neutral chairman appointed by the disputants or by the permanent arbitration court if agreement is not reached by the disputants. The Government appoints a panel of conciliators whose services are available to employers and employees in framing collective agreements.

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Swedish law recognizes the right of the Government to interpret the validity and meaning of the terms of collective agreements and for this purpose a labor court was created in 1929. The court has jurisdiction in cases involving (1) determination as to whether actions taken have been within the terms of the applicable agreement and (2) the consequences of illegal action. Although there is compulsion to accept the findings of fact made by the court relative to existing provisions, there is no attempt to introduce compulsion in the making of collective agreements. The court has seven members of whom the chairman and two members are appointed by the Government and must be neutral, two of them are legal experts, and one is an expert on labor questions. Two members each are appointed by The court may impose fines, and its employers and employees. decisions are without appeal except in cases of error or negligence on the part of one of its members. If one party brings a dispute before the court the other must appear and both must comply with the decision reached. As collective agreements are general in Sweden, the jurisdiction of the court is correspondingly wide.

A public conciliation system was introduced in Sweden by a law of 1906, supplemented by legislation effective in 1920. Under this system the Government attempts to bring disputants together for settlement of their differences, but it cannot declare its judgments binding. If a serious stoppage is threatened, the representative of the mediation office of the Ministry of the Interior who has jurisdiction in the district is required to exercise his good offices to bring about a settlement. The mediator may request either party to appear before him but he cannot exercise any compulsion. Recent amendments to the conciliation law have been introduced in order to strengthen it, but the system remains voluntary.

Belgium.—By royal decree of May 5, 1926, provision was made for establishing official conciliation and arbitration committees in every locality in Belgium. The Minister of Labor, who is responsible for the operation of the system, is directed to create such committees as he deems necessary and, in addition to the local bodies, has established regional and national committees to take action in cases of wider scope. Each local body has a president and secretary and not less than three employer and employee representatives, respectively, selected from lists submitted by employer and employee groups. The Minister may also designate a joint industrial council, of which many are established for the handling of disputes within industry, to

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conciliate or arbitrate disputes. When a strike appears imminent the party most concerned petitions the appropriate committee to call a meeting within 5 days. If settlement is not brought about, both parties are invited to state their case and proposals for settlement. A second meeting is called and, if no agreement is then reached, a signed statement is made by each party giving its reasons for refusal. The committee invites the disputants to agree upon an arbitrator, and if the suggestion is approved the terms of reference are drawn up. The decision of the arbitrator is binding only if this is agreed to in advance. If a strike takes place before the conciliation procedure is complete the Minister of Labor volunteers to act as arbitrator.

A unique feature of the Belgian system is the enforcement of penalties for causing a stoppage of work before an attempt is made to settle the existing difference under the prescribed procedure. If the employers are responsible the employees are entitled to unemployment benefit, if they belong to a fund, and when the employees strike they forfeit for 1 year the right to receive benefit in periods of unemployment.

Great Britain.—Joint machinery to settle disputes within the industries themselves is so extensive in Great Britain that the demand for the Government facilities is not great. Nevertheless voluntary public machinery for conciliation and arbitration is maintained. The facilities are conciliation committees established by the Minister of Labor, the industrial court, ad hoc boards of arbitration, individual arbitrators, and special courts of inquiry which are created on rare occasions. Settlement of differences within industry is encouraged and the Government intervenes only upon request. The single exception to this procedure is that a court of inquiry may be established by the Minister of Labor, in his discretion, to report on an existing or threatened dispute that has serious implications for the nation. This power is used only sparingly and as a means of informing the public and Parliament, and these courts do not attempt to negotiate with disputants.

The Minister of Labor is empowered to establish machinery for conciliation and arbitration under laws of 1896 and 1919. A conciliation staff is maintained, including staffs in the Ministry and in six major industrial centers. When the Government services are requested by either party in conciliating a difference, the Minister must be assured that every effort has been made to settle differences by the use of existing industrial machinery. He then intercedes in a manner dictated by his best judgment, as no rules of procedure are laid down by law.

In arbitration cases the Minister of Labor acts on invitation of both parties to a dispute and then only if recourse to voluntary machinery has failed to bring about a settlement. The service of arbininent

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tration may be performed by appointees of the Minister of Labor as follows: (1) A single arbitrator, sitting with or without assessors representing the disputants; (2) the industrial court, which is a standing arbitration tribunal having employer, employee, independent members, and one or more women; and (3) ad hoc boards, usually having three members consisting of a chairman, an employer member, and an employee member, chosen from panels of these respective groups established by the Minister under his statutory powers. Regardless of the body hearing a dispute, the decisions are not binding. Acceptance depends upon the willingness of disputants or the force of public opinion, unless the terms of reference include an agreement to abide by the decision. Awards of the industrial court are published; other awards are regarded as the property of the parties concerned. Civil-service cases are handled by a special tribunal having an impartial chairman.

Ireland.—The Government machinery in effect for settling disputes in Ireland is similar to that in Great Britain. It may be used only after attempts at direct settlement have failed. Parties involved in a dispute are not required to use the Government mediation and arbitration facilities nor are they obliged to accept the decisions made unless the terms of reference include such a provision. A court of inquiry may also be established when necessity demands it.

The joint industrial machinery for handling disputes in Ireland operates nationally. It consists of joint industrial councils, of which there are 11, each having equal numbers of employer and employee members elected by their respective groups. Each council is a continuing body which meets periodically to discuss matters of industrial interest and at irregular intervals when special problems confront the industry. Much of the work of the council is done by subcommittees whose decisions are binding and carry equal authority with those of the full council.

The Netherlands.—Government conciliation and arbitration procedure in the Netherlands closely resembles that of Great Britain, in that there are public facilities for conciliation, arbitration, and courts of inquiry; there is no compulsion to accept the findings unless the terms of reference specify acceptance; and recourse may be taken to the Government machinery only after voluntary bodies have failed to bring about a settlement. The systems of the two countries are unlike in that the Netherlands Government may intervene in a dispute as conciliator not only on request but also without invitation, if a strike may result and if at least 50 persons are affected.

A Government staff of conciliators is maintained in the Ministry of Labor, to operate in every district of the country and in particularly important industries. The conciliator has the right to subpens parties to a dispute, and they are bound to appear or send representatives

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under penalty of a fine. In his discretion he may recommend the intervention of a conciliation board or special conciliator and may make the necessary appointments on request. The board or conciliator appointed also has the power to subpena witnesses and order special inquiries if needed. If agreement fails or both sides refuse to submit their case to arbitration the board may hand down an opinion by majority vote, or the individual conciliator may render an opinion on the disputed points and communicate it to both sides. If the proffered settlement is refused, the decision may be published in order to influence public opinion.

Arbitration proceedings may be instituted in the first instance or after conciliation has been attempted. The Government conciliator may not act as arbitrator but is required to cooperate throughout arbitral proceedings and may appoint a secretary in agreement with the court or the arbitrator. The parties to a dispute may apply to the Government conciliator in writing for arbitration. If the case is suitable the conciliator draws up a minute of the proceedings, to be signed by both parties, containing the terms of reference to arbitration, nominating the arbitrator or chairman and members of the court, and stating the duration and validity of the forthcoming award. All members of the court are required to participate in the voting and a decision must have majority approval to be valid. The Minister of Labor may in his discretion cancel a decision and order another, or he may require revision of a decision, but changes may not be made retroactive.

Special inquiry may be made by the Government in disputes seriously affecting public interest and involving not less than 300 workers. Committees appointed for this purpose are named by the Minister of Labor. Decisions take into account existing circumstances and determine the extent to which the demands of either party may be granted. Although conclusions are published in every case in order to make conditions generally known, the report of proceedings may be given out only with the consent of the parties affected.

Canada.—Laws of the Dominion of Canada provide for (1) a system of governmental conciliation and arbitration to settle disputes involving coal-mine labor and employees engaged in the operation of public utilities (including railroads), which may be extended to include other industries if employers and employees request it; (2) machinery in the Ministry of Labor for conciliation in industrial disputes; and (3) inquiry into any matter connected with the good government of the country.

Under the terms of the Industrial Disputes Investigation Act of 1907, and of subsequent amendments, the Government attempts to settle disputes in the coal industry and public utilities. Thirty days' advance notice of changes in working conditions is required. The

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Minister of Labor is empowered to appoint a board of conciliation and investigation on his own motion. However, recommendations are not enforceable and the parties may accept or reject findings at their discretion. The Minister may intervene in cases that affect more than one Province or if the Province has declared that the dispute is subject to Dominion legislation. With the exception of British Columbia and Prince Edward Island, all the Provinces have delegated to the Dominion Government the power of compulsory investigation. The boards of conciliation have three members, one each being nominated by the employers and employees, respectively, and the third chosen jointly. In case of failure to make the necessary nominations the Minister of Labor may do so.

The Department of Labor maintains a permanent staff of conciliators in accordance with the terms of the Conciliation and Labor Act, 1906. Members of this staff are stationed at Ottawa, Montreal, Toronto, and Vancouver. Enabling legislation was first enacted in 1900, and under the 1906 law the Minister of Labor has authority to inquire into the circumstances of an existing or threatened dispute and arrange meetings of the parties with a view to bringing about an amicable settlement. Upon application of either party the Minister appoints a conciliator and on application of both parties an arbitrator. No compulsion exists in the application of this procedure or in enforcing findings.

Under the Inquiries Act, inquiries may be made into any matter connected with the good government of Canada or the conduct of any part of the public business of the Dominion. These inquiries are held by the Governor-in-Council, or royal commissions or commissioners may be designated to carry on the work. Although this legislation was not adopted for the express purpose of settling labor disputes, in practice it has developed that certain types of cases lend themselves to treatment under this procedure, such as those involving recognition of trade-unions and disputes between more than one employer and union. As in Great Britain and the Netherlands, the findings of the Governor-in-Council or the commissioners are not binding.

There are as many jurisdictions for the settlement of labor disputes that are not subject to Dominion legislation as there are Provinces in Canada. All of the Provinces have laws whereunder the respective governments may investigate disputes of employers and employees; and all except Prince Edward Island have Government-sponsored machinery established for the purpose of settling disputes within their jurisdiction. This machinery has been greatly expanded under the recent legislative program covering industrial relations in Canada. It exists side by side with the private bodies established by employers and employees to settle differences peacefully. Several Provinces,

notably Alberta, British Columbia, and New Brunswick, provide expressly that where there is a private arrangement for settling dis-

putes the provision of the Provincial statutes shall not apply.

Laws recently adopted in the four Provinces of Alberta, British Columbia, Manitoba, and New Brunswick contain provisions giving the local authorities much the same powers in disputes as the Dominion has under the Industrial Disputes Investigation Act. For example, the governments may intervene in an effort to settle disputes on invitation of either party or on their own initiative, employer and employee representatives are entitled to membership on investigating boards, and the parties to a dispute may accept or reject the findings of these boards. In the remaining Provinces, with the exception of Quebec, much of the work of government conciliators is carried on informally, according to procedure established in earlier years, and the jurisdiction of the Provinces in settling differences is not delimited by law.

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Quebec adopted a law in 1937 known as the Fair Wage Act. It provides for an arbitration tribunal, known as the "fair wage board," having the power to organize conciliation committees to determine fair labor standards for employees who have not or are unable legally to avail themselves of the provisions of other legislation to fix wages and for employees who have not been able to make an agreement with their employers. The board assumes jurisdiction in a case on written application of either party. Employers and employees are entitled to equal representation on conciliation committees insofar as possible and each committee is presided over by a delegate of the fair wage board. The decisions rendered are binding on both parties.

Sources: The officers who contributed material and the cities where they were stationed at the time the reports were made are as follows: Australia.—Henry B. Day and C. A. Hutchinson, American consuls, Adelaide; Adrian B. Colquitt, American vice consul, Brisbane; Wales W. Signor, American vice consul, Melbourne; Elbert G. Mathews, American vice consul, Sidney. Belgium.—William H. Beach, American consul, Antwerp. Canada.—Frederick C. Johnson, American vice consul, Fredericton; Hugh H. Watson, American consul general, and William W. Heard, American consul, Halifax; Joseph I. Touchette, American consul, William K. Ailshie, American vice consul, Montreal; Ray L. Thurston, American vice consul, Toronto; Nelson P. Weeks, American vice consul, Vancouver; Robert W. Newcomb, American vice consul, Victoria; and George D. Hopper, American consul general, and S. R. Lawson, American vice consul, Winnipeg. Denmark.—E. Gjessing, American vice consul, Copenhagen. France.—Edwin C Wilson, Counselor of American Embassy, Benjamin M. Hulley and Robert D. Murphy, American consuls, Paris. Great Britain.—Harry E. Carlson, American consul, London. Ireland.—P. C. Hutton, American consul, Dublin. Netherlands.—J. P. Moffitt, American consul, Amsterdam. New Zealand.—Glion Curtis, Jr., American vice consul, Wellington. Sweden.—Hallett Johnson, American consul general, and Roy E. B. Bower, American consul, Stockholm.

## Unemployment and Unemployment Relief

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# EXTENT OF WASTE FROM DEPRESSION UNEMPLOYMENT

THE unemployment of men and machines during the years 1930 to 1937 is estimated by the United States National Resources Committee to have caused a loss of real income of more than \$200,000,-This is the estimated amount of potential real income not produced because of unemployment. The amount in 1932 alone was about \$37,100,000,000 and even in 1937, about \$19,500,000,000. These estimates do not assume that full employment would have been required to produce the estimated additional amounts of income, for allowances were made in the estimates for "residual unemployment" of about 2,000,000 workers. Nor do the estimates assume a fuller use of machines and equipment than was prevalent in predepression years. The figures are based wholly on depression unemployment.1 (See accompanying table.) The real national income produced in 1937 was about the same as in 1929, but the extent of employment of men and machines prevailing from 1923 to 1929 would have produced a much larger income.

In discussing its estimate of potential real income not actually produced because of depression unemployment, the National Resources Committee states:

The significance of this figure of 200 billion dollars is hard to grasp, but some idea can be obtained by considering what 200 billion dollars would mean in terms of concrete goods. If all the idle men and machines could have been employed in making houses, the extra income would have been enough to provide a new \$6,000 house for every family in the country. If instead, the lost income had been used to build railroads, the entire railroad system of the country could have been scrapped and rebuilt at least five times over. Of such is the magnitude of the depression loss in income through failure to use available resources. It meant a lower standard of living for practically every group in the community.

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<sup>&</sup>lt;sup>1</sup>U. S. National Resources Committee. The Structure of the American Economy: Part 1, Basic Characteristics; A report prepared by the Industrial Section under the direction of Gardiner C. Means. Washington, 1939. The report was transmitted to the President by the National Resources Committee on June 9, 1939. This article consists of summaries of certain portions of the report and of excerpts from passages, bearing specifically on the problem of waste.

Loss in Potential Real National Income Resulting from Depression Unemployment of Men and Machines, 1930-37

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Year	National income produced <sup>1</sup> (billions of current dollars)	Index of price of goods 2 (1929=100)	Real na- tional income produced	Potential real national income	Loss due to depression unemploy. ment of men and machines	
PERSONN	L Frag	VI-4/12/	(Billion	Billions of 1929 dollars)		
1919.	67.5	102.5	65, 9			
1920	68.1	118.1	57. 7	61.0	********	
921	50.7	103 9	48.8	63. 0		
1922	58.7	97.2	60.4	65. 2	**	
1923	68.0	99.9	68.1	67. 0		
1924	67.9	99.9	68.0	68. 9		
1925	72.8	102.0	71.4	71.0		
926	74.9	102.7	72.9	73. 1		
1927	73.8	100.9	73.1	75, 2	*********	
1928	77.6	99.8	77.8	77.4		
929	81.1	100.0	81. 1	79.8		
1930	68. 3	97.3	70. 2	82.0	1	
931	53.8	89.0	60.4	84.5	1 2	
1932	40.0	80.4	49.8	86. 9		
933	42.3	76.6	55. 2	89. 5		
1934	50.1	79.8	62. 8	92.3		
935	55. 2	81.1	67. 5	94.9		
1936	63, 5	82.8	76.7	97.7		
1937	69.8	86. 2	81.0	100. 5		

<sup>1</sup> From 1919-28 based on national income as given in National Income and Capital Formation, National Bureau of Economic Research, p. 8. This was made comparable to the Department of Commerce estimates (given in Survey of Current Business, June 1938) of national income produced by adjusting for net

mates (given in Survey of Current Business, June 1938) of national income produced by adjusting for net imputed rent, net Government savings, depreciation, and changes in inventory.

<sup>2</sup> National Bureau of Economic Research, Bull. 59; figures for later years furnished by the Bureau (based on prices of capital goods weighted by 1 and Bureau of Labor Statistics cost-of-living index weighted by 9).

<sup>3</sup> Based on compound-interest curve obtained from the average of real national income produced for the years of the period 1923-29 (centered at 1926) and the estimate of potential national income in 1938 of 103.2 billions of 1929 dollars associated with a residual unemployment of 2 millions.

<sup>4</sup> Potential real national income less actual real national income produced.

<sup>5</sup> Due to depression unemployment of men and machines, 1930-37.

## Complexities of the National Economy

This gigantic waste of resources, human and material, is a symptom and a result of the imperfect operation of our highly complex national economy. It is for this reason that the National Resources Committee undertook to analyze the country's economic organization. In this connection there is an illuminating description of the complexity of the country's economy.

The American economy is the organized activity through which the 130 million people in this country obtain their daily living. Farmers raising food and fiber, miners extracting ore and coal, industrial workers fabricating raw materials into finished products, wholesale and retail distributors making goods available to consumers, and a host of workers performing the other countless tasks required by modern living-all of these are combined in a huge and highly complex producing organization which constitutes the national economy. complex organization the Nation's resources of manpower and materials are used to satisfy human wants.

The complexity of this organization is apparent when a single activity such as the provisioning of New York City is examined. It is estimated that in the metropolitan area of New York there is seldom more than 60 days' food supply on ment of

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hand. The meeting of this most basic need of the community requires a tremendously complex organization of farms and farmers, dealers and shippers, truckers and railroads, warehousemen and distributors, telegraph operators and traffic officers, financial institutions and inspection bureaus. To feed New York's 8 million people there is required an organization of manpower and material resources so complex as to be hard to visualize, yet running so smoothly that one is seldom conscious of its complexity or of the fact that it constitutes a single organization of activity, however independent the separate elements in that organization may appear to be. Occasionally a flood, storm, or financial panic, or a social or technical break-down in a basic service disrupts this organization, and its complexity becomes apparent as mayor or governor or private citizen attempts to readjust the organization of resources to meet the new conditions.

Similarly, for the Nation as a whole, the manpower and material resources are organized in a highly complex, highly interrelated manner. New Yorkers make clothing worn in Dakota; the Dakota wheat farmer supplies California with the materials for bread; transient labor in California picks oranges eaten in Texas; a Texan drills for oil which will operate automobiles in Maine; and a Maine farmer raises potatoes which feed men in New York. It is through such interrelated activity in many areas and many industries that the American community obtains its livelihood.

This highly complex organization, built up over a long period of years with constant readjustment to meet new conditions, is altogether too complex for any individual or small group to grasp in all its ramifications and in every detail. Yet it ties together, into an integral whole, individuals and corporations and governments, each of which performs functions that are necessary if the resources of the Nation are to yield a satisfying standard of living to the national household of 130 million people.

#### Imperfect Operation of the National Economy

The National Resources Committee pointed out the fact that no organization so complex as the American economy can function perfectly.

Resources are wasted or used ineffectively as parts of the organization get out of adjustment with each other, or as the organization fails to adjust to new conditions; as individuals fail to find, or are prevented from finding, the most useful field of activity; as material resources are unused, or as their effective use is impeded by human barriers; and as the most effective technology is not used or its use is prevented.

The waste of natural resources through misuse or ruthless exploitation is thoroughly familiar. The cutting of forests in a manner which delays or prevents reforestation; the farming of lands by methods which mine the soil of its fertility and encourage soil erosion; the extraction of petroleum by methods which blow into the air billions of cubic feet of natural gas daily; these are specific resource wastes to which attention has already turned and which reflect inadequacies in our organization of resources.

Equally important, but less often thought of as a waste of resources, is the idleness of men and machines that could be productively employed. The power of individuals to produce is a resource like unharnessed water power. It is gone if it is not employed. It cannot be stored. If 10 million men are able and willing to work, but are forced to be idle for a year by lack of jobs, the community has wasted the valuable resources of manpower. And because of idleness, the individuals are likely to suffer a loss of skill and a break-down of morale. The Nation

is poorer both by the goods that could have been produced and by the frustration and loss of morale of the unemployed individual.

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Idle machinery may also involve a waste of resources. When machinery is idle and accumulating rust or losing usefulness through becoming obsolete, when idle men are available to operate it and when its product would be useful to the community, its idleness is likely to constitute ineffective use of resources. Digging a large building foundation with pick and hand shovel and leaving an available steam shovel idle may not be as wasteful of resources as keeping both men and shovel idle, but it nevertheless involves waste. Waste is also involved when obsolete equipment uses more manpower and materials in doing a particular job than would be required if improved techniques were employed, or when production is divided among so many plants in an industry that no plant can have enough volume to run efficiently. In all of these cases, failure to use the best-known technology consumes manpower or materials that might be released to be used elsewhere.

#### Effects of National Waste on Individuals

In countries where there is a rigorous subordination of the individual to the Nation or the group, the aggregate waste may seem of chief significance. Even in a country where the emphasis is upon the retention of freedom of individual action, waste in its national aspect would have predominant importance in a struggle for national defense or survival. Normally, however, in American society, the role of the individual requires consideration of the effects of waste in defeating the main objectives of individual fulfillment and freedom of thought and action.

The full meaning of this failure to use resources effectively can only be realized by considering its impact upon individuals. Practically every individual in the community suffers as a result of these wastes. When the national income is 60 billion instead of 90 billion dollars, the worker suffers a lower income through unemployment or partial employment or through wage rates lower than resources make possible; the farmer receives a lower income because of a reduced home market; the return on capital is reduced as a result of the partial use of equipment and the resulting increase in unit costs. For each group in the community this waste of resources means a lower standard of living than would clearly be possible.

Even more basically significant is the individual frustration resulting from the inability to find an effective use for one's skills. Without the satisfaction of useful activity, without the sense of security in a job well done, most men lose some of

their self-reliance and some of their ability to be productive.

Moreover, as people become increasingly aware of the discrepancy between rich resources and poor results in living, and as the ineffectiveness in the organization of resources becomes more clear, a sense of social frustration must develop and be reflected in justified social unrest and unavoidable friction. Individual frustration builds into social frustration. And social frustration is quite as likely to work itself out in socially destructive as in socially constructive ways.

## The American Opportunity

The study of the problem of waste by the National Resources Committee was more than a mere analysis of the nature and extent of waste. The Committee's report pointed out that the waste of resources presents a tremendous opportunity.

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Such resources hold the promise of a much higher standard of living than is now being obtained and present a challenge to this country, as a national household, to work out their effective use. It is a surprising comment on a Nation that prides itself on its skill in organization, in administration, and in management, that such tremendous waste of resources can occur. The abundance of natural resources and the continental pioneering that has been necessary for their development may in part account for the past waste. With the continent spanned, the frontier shifts from the bringing of new resources into control to the more effective use of the resources already controlled. Here is the great challenge of today.

In attempting to take advantage of the opportunity presented by the resources now wasted, it is necessary to understand why the national economy functions imperfectly, since this is in essence the cause of waste.

Knowledge of structure becomes imperative when any organization or machine fails to run properly. The characteristics of any machine can be roughly grouped into its structural characteristics and its operating characteristics. So long as a machine runs well, its operating characteristics are all important, and its structure can be largely taken for granted. In order to drive an automobile it is enough to know how to manipulate the operating controls such as the starter, throttle, clutch, steering wheel, and brake. But when the machine fails to operate properly a knowledge of its essential structure is necessary in order to make the appropriate adjustments.

So also with the national economy; as long as it runs reasonably well, a knowledge of its structure is of secondary importance. Individuals, enterprises, and governments can continue to adopt the operating policies that have been found to work successfully in the past. But when it fails to run well, knowledge of its structure becomes of vital importance. Only as both its structure and the operating policies being adopted are clearly understood can faulty functioning be corrected.

Thus the National Resources Committee, in its analysis of the problem of waste and in its attempt to facilitate a solution of the problem, undertook a study of the structure of the national economy particularly in relation to operating policies. There is still opportunity, it is pointed out, for a democratic solution of the problem of waste arising from the imperfect functioning of the country's economy; but this opportunity may not remain indefinitely. The basis for a higher and more dependable standard of living is so apparent, and the frustration from failure to attain it is so real, that the time for solution by the traditional democratic methods is not unlimited.

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#### LONG-TERM UNEMPLOYMENT IN PHILADELPHIA

EMPLOYABLE persons among the long-term unemployed in Philadelphia in August 1936 represented between 20 and 25 percent of the total relief-case load in that city. From August 1934 to August 1936, approximately 66 percent of these cases had been given some work-relief or Works Program employment. In a study of these long-term

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unemployed,<sup>1</sup> the relief families were found to be larger than the average Philadelphia family, and they had on the average fewer employable members per family. They were also larger than the average family in the May 1935 total relief-case load. Chief wage earners among the long-term unemployed in Philadelphia, were similar to all chief wage earners on relief in that city in May 1935, in sex, race, and general occupational distribution.

As compared with other unemployed workers, however, they included relatively fewer women and many more Negroes. The hard core had relatively greater numbers of unskilled workers, and fewer skilled, semiskilled, and clerical or professional workers. The chief wage earners in these long-term unemployed were also older, on the average, than other unemployed workers for whom comparable data were available. There was an especially heavy concentration in the age group 30 to 55 years among the first priority workers in this study.

Of the long-term unemployed workers on relief, 28 percent had lost their last jobs in private industry in 1933 and 1934, and 41 percent in 1931 and 1932. They had been without employment for a longer

time than other jobless workers studied.

In a metropolitan community having varied commercial and manufacturing interests, like Philadelphia, the existence of long-term unemployed persons on relief, according to the report under review, is unquestionably the consequence of the volume of general unemployment and its incidence in relation to the composition of families, and also of the volume and incidence of protracted unemployment in relation to the race, age, and occupational characteristics of the jobless workers.

Some of the chief wage earners among the long-term unemployed in Philadelphia are there because of insufficient earnings in relation to the size of their families. Others are in the group because the types of employment in which they had been engaged were highly casual—for example, longshore work, truck driving, and other kinds of unskilled labor. The skilled workers among the long-term unemployed come, for the most part, from the building trades, and it is suggested that possibly they have remained on relief in order that they might have some income at a time when private construction jobs were notoriously scarce. The scattered workers among the long-term jobless who are from declining industries are of comparatively less importance in a city like Philadelphia, although their special problems of economic adjustment call for careful consideration. The dominant fact concerning long-term unemployment in Philadelphia in 1936 was the relatively large number of older persons and of unskilled workers.

Up to date, however, it is not known whether notable skill reduces the general hazards of unemployment, whether there is a greater

United States. Works Progress Administration. National Research Project (in cooperation with University of Pennsylvania, Industrial Research Department). The Long-Term Unemployed in Philadelphia in 1936. Washington, 1939. (Report No. P-8.)

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n with Philademand for skilled and semiskilled workers in recently expanded industries, or whether the advantageous employment status of the skilled and semiskilled is the result of the combination of both of these factors. English studies, the Philadelphia labor-market studies, and other National Research Project investigations indicate that "age is no bar to the continued holding of a job but is a serious handicap to reemployment once a worker becomes unemployed." The passage of time accentuates the problems of the unfortunates in the hard core of the unemployed, not the least of these problems being the self-perpetuating character of protracted joblessness itself.

## Industrial and Labor Conditions

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#### ENERGY RESOURCES AND NATIONAL POLICY

IN PRESENTING to Congress a report of the National Resources Committee on national policy relating to energy resources, the President stated: "It is difficult in the long run to envisage a national coal policy, or a national petroleum policy, or a national water-power policy without also in time a national policy directed toward all of these energy producers—that is, a national energy-resources policy. Such a broader and integrated policy toward the problems of coal, petroleum, natural gas, and water power cannot be evolved overnight."

#### Extent of Energy Resources

The most recent estimates of the Nation's energy resources are summarized by the Committee as follows:

(a) Coal of all ranks, 3,000 billion tons or the equivalent of 2,500 billion tons of bituminous coal, in comparison with 1937 production of about one-half billion tons and accumulated production through that year of 23 billion tons.

(b) Petroleum in proven natural reservoirs, 15 billion barrels, in comparison with 1937 consumption of 1½ billion barrels. These proven reserves are equal to about 4 billion net tons of equivalent bituminous coal;

(c) Proven natural-gas reserves, from 60 to 100 trillion cubic feet, in comparison with 1937 consumption of about 2\% trillion cubic feet. The reserve is equivalent to 3 or 4 billion net tons of bituminous coal.

(d) Recoverable oil from oil shale has been estimated at 92 billion barrels, or the equivalent of 21 billion net tons of bituminous coal. This oil, be it noted, is recoverable only at a cost far above the present cost of natural reservoir oil. In fact, it is probable from present techniques that coal will provide liquid fuels at lower cost than shales;

(e) Feasible undeveloped water-power sites of the United States, when a market for their output exists, are estimated to be capable of producing six times as much energy as those now developed, but only a little more than twice the electric energy produced in 1937 for public use by fuel and water-power plants combined (64 percent by fuel plants and 36 percent by hydro plants). All our water power, including both that already developed and that feasible of development, could produce energy annually equivalent to only about one-fourth of the energy contained in all mineral fuels consumed in the country in 1937 for all purposes. Thus it can be seen that water power can supply only a fraction of our energy requirements. The mineral fuels must bear the main burden.

<sup>&</sup>lt;sup>1</sup> U. S. National Resources Committee. Energy Resources and National Policy. Report of Energy Resources Committee to the National Resources Committee. Washington, 1939.

## Recognition of the Need for a National Policy

The report of the National Resources Committee describes the various measures undertaken in the past by the Federal Government and the States to conserve the country's tenergy resources and to assist in the wise use of these resources. This pointed out, however, that most of these measures were directed toward the problems of a single field without a coordinated policy based on a recognition of the interrelations of the several types of resources and of the industries connected with them. The measures taken in the past have included the protection of the public interest in water power; assistance to the coal-mining industry and the relief of human distress in that industry; and the correction of some of the thore demoralizing and wasteful practices and conditions in the industries connected with petroleum and natural gas.

The Committee emphasizes the fact that although these measures undertaken in the past were in maky instances extremely serviceable in protecting the public interest, it is now time to take a broader view. It is necessary to recognize more fully than was formerly possible the fact that each of these resources affects the others and that their interdependence requires more careful consideration of conflicting interests and points of view and of their effects on the public interest.

Coal, oil, natural gas, and water power are the principal sources from which we have obtained the energy for the heat, light, and power essential to a growing industrial civilization. Particularly in recent years the conservation of these great natural resources, their orderly development, their readiness in case of need for the national defense, and the preservation in economic health of the industries that make them available have become matters of national concern. We have realized that the abundance provided for our use by nature will not last forever. We are beginning to realize that the welfare of millions of our people is bound up in these great industries.

## Recommendations of the National Resources Committee

Extensive study of the subject by many specialists both governmental and nongovernmental led the National Resources Committee to make a series of recommendations, summarized as follows:

The obvious fields of remedy with respect to conservation of energy resources seem to lie (1) in promoting greater efficiency in the production of the fuel resources from the standpoint of recovery; (2) in promoting greater economy in the use of fuels; and (3) in placing a larger share of the energy burden on lower grade fuels and water power. To serve these objectives, the following recommendations are advanced:

1. Coal.—We believe that the problems of the bituminous-coal industry are too large for any one State to solve. The intensity of interstate competition makes the ills of the industry a matter of national concern and Federal responsibility. Some form of Federal regulation of bituminous coal is clearly necessary. The particular form of regulation that has been written into the Bituminous Coal

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Act of 1937 undoubtedly represented the majority opinion within the industry as the best approach to the problem, but a judgment on the effectiveness of the measure must be withheld until the act has become fully operative. Every opportunity should be provided for conclusive experiment with the system of controls which the law requires. It is well to bear in mind that although the act is limited to 4 years, the problem with which it deals is not a short-lived emergency. Whatever modifications the experience gained under the 4 years of life of the present act may suggest, the need for public supervision of the coal industry will remain permanently. Some means are required for effectively balancing production against requirements, whether by control of prices, by control of distribution, or by both. A less immediate but more fundamental need is to control the opening of new mines and retard expansion of capacity beyond reasonable requirements. Adequate safeguards must be provided for maintaining labor standards and protecting the rights of consumers by Government supervision of the system of regulation.<sup>2</sup>

2. Oil and gas.—We propose that a Federal oil conservation board or commission should be created within the appropriate Government department to administer the Federal interest in the oil and gas industry and to make necessary rules and regulations concerning the production of and commerce in oil and gas. It should have the authority to require that oil and gas be extracted by such methods as are adequate to avoid waste and to protect the interest of all producers drawing from a common reservoir.

It is recognized that the development of minimum standards for the production and transportation of oil and gas designed to further the national interest in conservation of these resources is a complex problem, and that such standards should be developed in cooperation with the State regulatory agencies and the representatives of the industry. It is recommended, therefore, that the Connally Act be extended for such time as may be necessary for the framing and enactment of an adequate Federal oil and gas measure.<sup>3</sup>

3. Water power.—The committee wishes to emphasize—as it has in its previous reports—that an active public policy of multiple-purpose development of water resources is desirable, particularly in view of the pressing character of problems related to flood control, public water supply, stream pollution, irrigation, and navigation. An active policy of public development of water power is likewise desirable under certain appropriate conditions. Both the development directly for power purposes, where there is no conflict with more urgent water control, and the best feasible use of the head made available by water storage for other purposes, would contribute toward the attainment of three major national objectives, namely: (a) Conservation of scarce fuel materials—petroleum, natural gas, and the higher grade coals; (b) strengthening the national economy, through making cheaper electric energy more widely available; (c) strengthening the national defense, through assuring an ample supply of electric energy in time of war.

Multiple-purpose plans for stream development which are aimed at the several important purposes, including direct or incidental power production, should be designed and executed in terms of plans for whole drainage basins or major subbasins. Design of the power system in any of the basin developments should include the best practicable interconnection (a) of the several plants within a basin system, (b) of neighboring basin systems (within the reach of economic

The National Resources Committee directs attention to the fact that after its report was completed the National Bituminous Coal Commission was abolished under the President's Reorganization Plan No. 2, its powers, duties, and functions being transferred to the Secretary of the Interior.

After the Committee's report was completed, the Connally Act, regulating interstate and foreign commerce in petroleum, which would have expired on June 30, 1939. was extended by Congress for an indefinite period.

transmission), and (c) of the steam capacity built or acquired to balance capacity. Federal policy should, in general, embrace eventual merging of private water-power plants into the system covered by any basin plan.

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ign comidefinite Transmission of electric energy is in many social and economic essentials closely akin to transportation of commodities. Particularly as the economic limits of transmission are extended, we believe that the national interest will be served best by coordinated systems of interconnections which will make available in wider markets energy derived from the most economical sources, regardless of whether they are large-scale hydro plants or efficient steam plants. Such coordinated systems would make the Nation less vulnerable to attack in time of war and less vulnerable to the emergencies of peace as well as better prepared for the centinuing problems of peacetime development.

4. Research.—Both the production and the use of the mineral fuels are accompanied by a large waste of some of the most valuable resources of the Nation. Naturally, the fuels that are easiest to obtain and most convenient to use are being depleted most rapidly, leaving for future generations fuels more difficult of access, less suited to the uses for which they are required on the basis of present-day values, or lacking in the convenience that gives them form value. We believe that the supplies of these high-grade fuels can be protected from unnecessary depletion by research (a) to promote greater efficiency in production from the standpoint of the percentage of recovery, (b) to promote a greater economy in use, and (c) to fill a larger part of the demand for energy by the use of lower-grade fuels.

Both fundamental and applied research should be stimulated and supported by the Federal Government in the agencies concerned with the energy resources, and this research work should be vigorously pointed in the direction of conservation of these resources, i. e., toward the efficient use of our energy resources in the interest of the national welfare, the avoidance of unnecessary waste in their production and utilization, and the safeguarding in economic health of the indusdries and populations on which we rely for the development of these vital resources. Much of this research function can be discharged only by the Federal Government, although important parts of it have been and should be discharged by the State governments, by educational and other quasi-public agencies, and by the affected industries. Wherever conducted, however, this basic function of extending the frontiers of knowledge and application in this field requires and merits continuing and vigorous stimulation by the Federal Government.

5. Continuous planning.—A widening interest and responsibility on the part of the Federal Government for the wise conservation and utilization of the Nation's energy resources raises many perplexing questions of policy determination. In essence, there must be continuous adequate planning and provision for studies which will reflect the best technical experience available as well as full consideration for both regional and group interests.

Better to provide for continuous planning and studies of policies, we recommend the organization of an advisory planning group for the energy resources. This group, however, should comprise only one unit in an over-all planning agency specifically established within the Federal Government to serve the President and the Congress in an advisory capacity on planning and policy matters for all our national resources. Members of such an energy resources planning group should include representatives from the Federal and State agencies concerned, from the industries, and outside experts. The organization of such an advisory planning group would not mean the abolishing of the planning functions now carried on by existing agencies. To the contrary, planning in existing agencies would have to be encouraged and strengthened; for without it the over-all planning group would be left without background, experience, and technical assistance.

## OUTPUT AND PRODUCTIVITY IN BITUMINOUS-COAL MINING, 1936-38

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OUTPUT per man per day was fractionally higher in 1937 than in 1936 in the bituminous-coal industry, according to figures published by the United States Bureau of Mines. Preliminary statistics show that 83,500,000 tons of coal were mechanically loaded in 1937, and that while sales of mobile loading machines, scrapers, and conveyors decreased in 1938 as compared with 1937, the sales of pit-car loaders increased by 334.4 percent, from 32 to 139 units, in this 1-year period. Production of bituminous coal decreased 22.6 percent, to an estimated total of 344,630,000 net tons in 1938, from 445,531,449 net tons in the preceding year.

Some of the more important statistics of the bituminous-coal industry are shown in the following table. Figures are given for 1936 and 1937 and also for 1938 insofar as preliminary estimates are available.

Salient Statistics of the Bituminous-Coal Industry, 1936, 1937, and 1938

Item	1936	1937	1938 (preliminary
Total production	439, 087, 903 6, 875 477, 204 399, 367 77, 837 199 35, 1	445, 531, 449 6, 548 491, 864 (1) (1) 193 35. 1	344, 630, 00 (1) 435, 00 (1) (1) (1) (1)
Per year of 261 days (5-day week basis) do Output per man per day do Output per man per year do Underground output cut by machine percent Underground output mechanically loaded do Quantity mined by stripping net tons Quantity cleaned by wet or pneumatic processes do	680, 000, 000 576, 000, 000 4. 62 920 84. 8 16. 3 28, 125, 857 53, 332, 040	710, 000, 000 601, 000, 000 4, 69 906 (1) 20, 2 31, 750, 853 (1)	(1)

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<sup>3</sup> Exclusive of central washeries operated by consumers.

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## BRITISH COTTON-INDUSTRY REORGANIZATION ACT, 1939

THE elimination of surplus machinery and the establishment of minimum prices in the cotton industry of Great Britain are the chief purposes of the Cotton Industry (Reorganization) Act which was given royal assent on August 4, 1939.1 Under the terms of the law, the effective date is 3 months after enactment, or such earlier date as the

Not yet available.
 The figures represent the full-time week as reported by the operator, not the hours actually worked by

<sup>•</sup> U. S. Department of the Interior. Bureau of Mines. Bituminous Coal: chapter from Minerals Yearbook, 1939. Washington. 1939.

<sup>1</sup> Great Britain. Parliament. Acts: 2 and 3 Geo. 6, ch. 54, Cotton Industry (Reorganization) Act, 1939. Economist, London, September 2, 1939, p. 464.

Board of Trade designates.<sup>2</sup> Two months after the time fixed for application of the legislation, no person may carry on business in the industry unless registered in the general register established under the law.

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This is the second regulatory law, covering the textile industry, whereby machinery is established for the reduction of excess capacity. Under the Cotton Spinning Industry Act of 1936, provision was made for the purchase and retirement of cotton-spinning mills and machinery, in order to reduce the redundancy existing in the spinning section of the industry.<sup>3</sup> The law which is here summarized relates to the cotton industry as a whole and to certain related industries. Among its provisions is one whereby the Board of Trade is authorized to extend the period of effectiveness of certain sections of the Cotton Spinning Industry Act of 1936.

#### Administration

The Board of Trade is the Government agency responsible for the administration of the act. This body is empowered to constitute a board, to be known as the cotton industry board, to administer sectional schemes and perform such other functions as are prescribed under the legislation. The cotton industry board is given discretion as to the manner of promoting the interests of the industry. The cotton industry advisory committee, consisting of three independent persons appointed by the Board of Trade, is charged with the duty of advising and assisting the latter body in matters relating to the industry.

It is provided that within 6 months after the effective date of the law, the joint committee of cotton trade organizations shall submit proposals to the Board of Trade for constitution of a council to be known as the representative advisory council. Before making its recommendations, the joint committee is required to consult with representatives of merchants and of employers and employees engaged in the cotton industry and in the manufacture of rayon fiber, in the United Kingdom. The Board of Trade may modify the proposals and issue an order giving them effect. The representative advisory council may, upon the Board's request, advise the cotton industry board with regard to the exercise of its powers.

A special committee, the export development committee, must be appointed by the cotton industry board to make recommendations for promoting the development of export trade in the products of the industry.

<sup>&</sup>lt;sup>1</sup>A Cotton Control Board was established on September 17 "to consider matters affecting the cotton trade arising out of the war and to make recommendations to the responsible Ministers on such matters as may require action." The Manchester Guardian, in its issue of September 18, reported formation of this board, and stated that "although the war has made it impossible to go on with the schemes under the Cotton Industry (Reorganization) Act, the essential principle of that act, the creation of a central board, is retained."

<sup>&</sup>lt;sup>3</sup> Great Britain. Board of Trade. First Annual Report of the Spindles Board. London, 1937. (Cmd. 5579.)

## Registration of Business

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Persons carrying on business in the industry, and merchants, are obliged to register and pay a fee within 2 months of the effective date of the act. Failure to register is punishable by a fine, which is increased for the second or any subsequent offense. The register must show the place or places of business of the registrant. All registered persons must supply the cotton industry board with such information as it may require in performing its duties in the maintenance of the register.

#### Redundancy and Price Schemes

Bodies which the cotton industry board deems to be substantially representative of the interests of persons carrying on business in any section of the industry may submit sectional schemes (1) for the elimination or reduction of redundant plant, or (2) for the determination of prices or charges or both, in connection with the sale of products of the industry or the subjection of such products or the raw materials thereof to processes. These are known as the redundancy and price schemes, respectively.

Each redundancy scheme is to be administered by a board of from three to five persons appointed by the Board of Trade. Cotton mills, in part or as a whole, may be acquired by agreement, if this is considered expedient by the board, in order to eliminate or reduce the redundant plant. The board may dismantle and break up any plant and dispose of any property acquired, but it may not cause any plant to be acquired and removed from the United Kingdom.

The law prescribes that a price scheme shall be administered by a board elected by persons registered under the scheme as carrying on business in the section of the industry to which the scheme relates. They are empowered to establish prices below which products shall not be sold by persons registered under the scheme, and to fix the minimum charges that may be made by registered persons for processing raw materials.

## Rayon Committee

A special body, the rayon committee, may be constituted by the Board of Trade if it is determined by the cotton industry advisory committee, after consulting representative bodies in the rayon-fiber, rayon-spinning, and rayon-weaving industries, that they desire to be so represented. The rayon committee, if formed, shall consist of 10 members appointed by the Board of Trade on a basis prescribed by the law. It is further prescribed that the rayon committee shall be consulted on matters affecting that branch of the industry, and that its reports shall be taken into consideration in establishing schemes.

#### Financial Provisions

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Operations under the act are financed by fees payable for registration, and annual contributions thereafter. In addition, Government contributions may be made toward certain expenses of the cotton industry board, and Government loans granted to boards administering redundancy schemes.

### Special Functions of Cotton Industry Board

When it appears that such action will benefit the industry, the cotton industry board may conduct, promote, or encourage, by financial assistance or otherwise, research and experiments in matters relating to the manufacture and consumption of products of the industry. The board may also publicize the products of the industry, collect and publish statistics, and negotiate with any person on any matter appearing to affect or likely to affect the industry.

## Wartime Emergency Controls

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## STATUS OF CHILDREN EVACUATED FROM CITIES IN GREAT BRITAIN

OF THE 3,000,000 persons evacuated from cities to less congested areas during the first days of September 1939, as a measure of safety from air raids, approximately one-half were children of school age. Those evacuated included children under 5 years old who were accompanied by their mothers, as well as expectant mothers, blind persons, cripples, and invalids. The movement of priority classes was begun, as a precautionary measure, before the declaration of war. This action had previously been urged by the leader of the Labor Party on the floor of the House of Commons. Although the mass movement of these city dwellers to less congested areas taxed the transportation facilities of the country, the program was carried out in an orderly manner according to a predetermined plan.

During the hours from 8 a. m. to 5:30 p. m. on the days set for evacuation, the general population was asked to refrain from unnecessary journeys on railways, subways, busses, and streetcars. Children were instructed to report at their schools at specified times. They came supplied with hand luggage and sufficient food for the day, and were sent away in groups, accompanied by their teachers. The

London children alone were escorted by 22,000 teachers.

The evacuation of their children was optional with the parents, and on September 7 it was stated in the House of Commons that the question of further arrangements, whereby parents who had decided against sending their children might still do so, was under consideration. Householders in the receiving areas were obliged to billet persons assigned to them and were subject to a fine, imprisonment, or both, for noncompliance.

Billeting allowances are made by the British Government to the householder and are highest for unaccompanied children. If only one child has been received the payment is 10s. 6d. per week, to cover board and lodging. In the case of two or more unaccompanied children the allowance is 8s. 6d. for each one. Payments for unaccompanied children who have reached the age of 16 years will be at the rate of 10s. 6d. per week, regardless of the number of children billeted in a household. When children are accompanied, payment is made

for lodging only, the allowance being 5s. per week for the adult and 3s. for the child. For teachers assigned to receiving centers, 5s. per week each, for board, is allowed.

Children who reach the school-leaving age of 15 while evacuated may remain at school, in which case the billeting allowance will be continued. If they choose, they may return home or accept employment in the reception area, but in either case the billeting allowance will be withdrawn. Leaving school is also permissible at age 14, under the same terms, if a certificate of beneficial employment is obtained, as prescribed by the Education Act, 1936. Before an evacuated child is allowed to leave school, the parents are to be consulted.

The authorities in the evacuated and receiving centers are jointly considering the question of suitable arrangements in regard to the fees payable for the education of the evacuated children. School facilities in the receiving centers must be expanded sufficiently to take care of all children in the respective areas. Registration is proceeding in the usual manner, but records of evacuated children are kept apart from those of the children normally on local school rolls.

The Minister of Health stated in the House of Commons on October 4 that the estimated initial cost to the Government of the evacuation scheme for England, Wales, and Scotland, including the probable cost of transport, was £2,000,000 and that the weekly expenditure for billeting is approximately £450,000. Effective October 28, a scheme was to be introduced for recovery from parents of at least a part of the sum expended for billeting their children. The average cost per child being roughly 9s. per week, parents are asked to pay the full charge of 9s. if they can afford it. For other parents the standard charge is 6s. per child per week, or less if they are unable to pay this amount.

Sources: Great Britain, Parliament, House of Commons, Official Report, Debates (vol. 351, No. 165) September 7, 1939, (vol. 351, No. 177) October 4, 1939, and (vol. 351, No. 178) October 5, 1939; Local Government Chronicle, London, issues of September 2 and 9 and October 7, 1939; Economist, London, September 2, 1939; Manchester Guardian, Manchester, issues of September 1 and 4, 1939; Daily Herald, London, September 4, 1939; Christian Science Monitor, Boston, September 26, 1939.

# WARTIME CONTROL OF FOOD DISTRIBUTION AND PRICES IN FRANCE

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SEVERAL decree-laws passed in 1938 and 1939 in France provide special powers for the Government in time of war and for the general organization of the Nation on a war-time basis. A decree-law of September 1, 1939, initiated by the Council of Ministers, provided for control of the food supplies of the country by the Minister of Agriculture, subject to certain provisions of these laws. A decree of

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<sup>&</sup>lt;sup>1</sup> Journal Officiel, Paris, September 2, and 6, 1939.

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the same date provided for a secretary-general of provisioning in the Ministry of Agriculture. The law provides that the Minister of Agriculture shall, according to consumption requirements, assure the distribution of the various products held by the general provisioning service. This may be done directly by the Minister or through the medium of a committee formed of special groups of producers, dealers, and consumers, which was authorized by the law of July 11, 1938. The Ministers of Agriculture and Finance will determine the procedures for making purchases and will organize a committee to investigate the conditions under which purchases and sales are made.

All financial operations are charged to a special account in the Treasury, amounting to 8 billion francs, for the "general revictualing of the nation in war time." This account was available as of the first day of mobilization or in the case of aggression by another country which required the country to provide for defense. The Minister of Agriculture in charge of provisioning, or his deputy, has control of

expenditures from the special account.

The law provides that administration shall be centralized under the authority of the Minister of Agriculture, and that local administration in each Department and in the large seaports, shall be under

the direction of the commissary of stores.

Prices for all products included in the provisioning program (unless they are subject to existing laws and regulations), are to be fixed by the Minister of Agriculture, subject to consultation with the consulting committee, which shall consist of representatives of the ministries concerned and of workers and employers in commercial, industrial, or agricultural enterprises, as provided for in the law of July 11, 1938. In case of requisitioning these prices cannot be exceeded. Wholesale prices of agricultural and food products, with the exception of those subject to existing laws and regulations, shall be fixed by decree of the council of ministers upon the proposal of the Minister of Agricul-The decree will also fix the limits within which the prefects may establish prices for middlemen and retailers. In fixing these prices the prefect may take into account regulations applying to all or part of the communes of a Department. Meat prices are fixed by this procedure only on request of the mayors or upon their failure to exercise the powers conferred on them by law. Sellers must post prices in a conspicuous place, and must attach a price label to each article.

The Minister of Agriculture will regulate the choice of substitutes and the proportion of substitutes to be used in food products.

Penalties, consisting of fines or imprisonment, which were fixed by the law of July 11, 1938, are provided for violations of the decrees and orders issued by the Minister of Agriculture and the local authorities. Goods distributed illegally under this law are subject to confiscation and violations are punishable by fine or imprisonment.

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ed by es and rities. According to the earlier law, provision of the necessary food supplies of the country is to be secured through friendly agreement or, in default of that, by requisition. For agricultural products and all other products which are ratable, prices are fixed on the basis of the official price indexes of the last 5 years preceding mobilization or the effective date of the law.

Persons owning, producing, or holding resources necessary to the country are required to declare them, and failure to do so makes such persons liable to fine or imprisonment.

The details covering the application of the present decree will be fixed by decrees countersigned by the Minister of Agriculture and the other ministries concerned.

The decree is applicable to Algeria and may be extended to the other colonial possessions under the jurisdiction of the Minister of Colonies, upon his recommendation.

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### REGIONAL DIFFERENCES IN THE COST OF HOUSING

VARIATIONS in the average cost of residential buildings in cities of different sizes and as between regions are discussed in a recent bulletin of the National Bureau of Economic Research.¹ The basic data are taken largely from census materials used in a survey of residential real estate to be published later by the same organization. The bulletin here reviewed is concerned primarily with the measurement of residential values and rents, as knowledge of the existing differences is believed by the author of the report to be essential in order to deal with many of the problems in the housing field.

Costs are treated in two sections, of which the first deals with variations according to geographic regions and density of population, and the second describes other differences and considers the influence of the more important factors that aid in their explanation and interpretation, such as age of houses, land costs, and materials used. The quantitive measures are primarily in terms of housing existing in 1930. The differences in costs of housing revealed for 1930 are regarded as still holding, in the main. In interpreting the data in the light of present costs, the author points out that it should be remembered that values in 1939, while probably not as low as in 1934, are unquestionably lower—about one-fourth—than in 1929.

### Geographic Variations

The regional differences in values of nonfarm dwellings in 1930 are shown in table 1.

Table 1.—Regional Differences in Values of Nonfarm Dwellings, 1930

nan of earliest after	Ave	rage value	of—	Relative value of—				
Region	All houses	Owner- occupied houses	Rented houses	All houses	Owner- occupied houses	Rented		
United States	\$5,022	\$5, 833	\$4, 347	100	100	100		
New England	4, 885 7, 205 5, 376 3, 549 3, 397 2, 712 2, 967 2, 886	6, 748 7, 824 5, 927 4, 253 4, 883 3, 846 3, 712 3, 259	3, 467 6, 759 4, 803 2, 765 2, 406 1, 960 2, 412 2, 547	97 143 107 71 68 54 59 57	116 134 102 73 84 66 64 56	80 152 110 64 53 44 54 59		

<sup>&</sup>lt;sup>1</sup> Wickens, David L. Differentials in Housing Costs. New York, National Bureau of Economic Research, September 17, 1939. (Bull. 75.)

Residential values vary markedly between regions, reflecting underlying economic, social, and physical differences arising from climate, unequal natural resources, varying degrees of industrial and agricultural development, differences in income, and the extent of urbanization, as well as local custom and tradition. In dealing with dollar value it is not possible fully to show qualitative differences, and the regional values given here represent comparable housing facilities only in part. Taking these factors into account, the figures in table 1 show that the most expensive residential area is in the Middle Atlantic States-New Jersey, New York, and Pennsylvania-followed by the industrial States of the East North Central Division-Michigan, Wisconsin, Illinois, Indiana, and Ohio. The lowest regional average is for the East South Central States—Kentucky, Tennessee, Alabama, and Mississippi-for which the dollar value of a house is slightly more than half as high as for the United States as a whole and 63 percent lower than in the Middle Atlantic States. Owneroccupied and rented houses show the same geographic variations except that the variation is much wider for owner-occupied dwellings.

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As between cities of different size, except for exclusive residential suburbs, housing becomes less costly as the size of towns decreases. Farm dwellings, like those in small towns, are least costly. This is true in all parts of the country. Moreover, rented houses are usually valued at lower figures than those occupied by their owners. The greatest contrast in rented and owner-occupied house values is between large northern cities and small towns in the South and the Mountain States.

### Other Factors Affecting Variations

Site value is an important factor in determining differences in the value of residential properties. On older properties it constitutes fully 20 percent of total value and for new nonfarm properties 15 percent. Variations also exist in cities of different sizes and types. The Federal Housing Administration experience with properties insured during 1937 showed that land was a larger factor in new-house costs in large cities than in smaller towns. The average was from 13 to 18 percent in cities of over 50,000 population, from 12 to 15 percent in smaller towns. In cities outside metropolitan areas the site represented 14 percent of the cost and in cities within these areas, 16 percent. The average value of property and land site and the ratio between these values are shown by regions in table 2 for new single-family houses for which mortgages were insured under the FHA in 1937.

TABLE 2.—Average Value of Property and Land Site and Ratio of Site to Property, Value, by Region

[New single-family houses accepted for FHA-insured mortgages in 1937]

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Dagian	Region Average value of land value to	Denley	Average of-		Ra of l		
Region	Property	Land	value to property	Region	Property	Land	valu
United States	\$6,097	\$921	15. 1	South Atlantic East South Central	\$5, 652	\$842	
New England Middle Atlantic East North Central West North Central	6, 409 6, 826 7, 038 5, 354	833 1, 154 1, 021 680	13. 0 16. 9 14. 5 12. 7	West South Central Mountain Pacific	4, 886 4, 834 5, 183 5, 637	728 744 539 896	

The chief determinant as to whether material cost is low or high is whether construction is of wood or brick. Not only does brick construction cost more than wood, but brick dwellings are usually larger than wood and naturally size affects costs. The regional pattern for costs by kind of material is generally similar to the variations in cost for all dwellings, being highest in the Northeast and lowest in the South and West.

Type of structure also accounts for variations in cost. In general, apartments rent for more than one-family houses, and two-family houses bring the lowest rent. Several reasons are given for this difference, namely that large apartment buildings are highly concentrated in the larger cities of the Northern and Eastern States, a larger proportion of these apartments are newer than the houses, and they are usually built of brick or steel and concrete rather than of wood. The average value of rented nonfarm dwelling units by type and population group as of April 1, 1930, is shown in table 3. These figures indicate that the average value of 3 or more family apartments is higher than for 1- or 2-family structures in all cases.

Table 3.—Average Value of Rented Nonfarm Dwelling Units, by Type and Population Group, April 1, 1930

	Population group									
Type of building	Total	100,000 and over	25,000 and under 100,000	10,000 and under 25,000	5,000 and under 10,000	2,500 and under 5,000	Under 2,500			
All types	\$4, 347	\$5, 751	\$4, 416	\$3,832	\$3, 347	\$2,882	\$1,98			
1-family2-family	3, 596 3, 693 6, 212	5, 101 4, 539 6, 744	4, 475 3, 849 4, 891	3, 940 3, 316 4, 146	3, 409 2, 913 3, 686	2, 924 2, 537 3, 210	2, 04 1, 66 2, 11			

Rents and values are also influenced by the absence or presence of facilities such as heating, utilities, mechanical refrigeration, and garages. Data for 11 cities obtained in the Financial Survey of Urban Housing, 1934, showed that 8.9 percent of the gross rent of 1-family

houses covered the cost of facilities as compared with 11.4 percent for 2-family houses and 24.7 percent for larger apartments.

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Community services, such as streets, paved walks, drainage systems, and other public improvements are not provided in the same ratio in large and small cities, and the costs vary. The effects of these improvements are not measurable from available information.

Age is among the most important factors determining the cost at which housing may be bought or rented. In the Financial Survey of 1934, new dwellings of all types built in 1930–33, inclusive, were valued 40 percent above those built in 1890–99 and nearly 20 percent over those erected in the 1920's when construction costs were much higher. If figures were available for 1939, the report reviewed states, the contrast would be even greater.

The relative availability of credit for financing influences costs. Location and homogeneity of properties may make it easier to obtain mortgage loans. Farm properties are at the greatest disadvantage in this respect.

In addition to being influenced by the same factors that affect housing costs, new construction costs are affected by differences in costs of materials and labor. Nearness to the lumber supply in small towns, in the country, the Pacific Northwest, and parts of the South probably accounts in part for relatively low material costs. Labor costs are usually highest in large cities and therefore remote areas also have an advantage in this respect.

Notwithstanding the differences in housing expenditures by families within the same income group, the amount spent for shelter is usually related to income. This accounts for the differences in housing costs between the North and the South. In all areas housing is a substantial item in family budgets, varying at the lower income levels from 15 to 25 percent of total expenditures. Therefore, differentials such as those here summarized have an important bearing in cost-of-living studies.

## Youth in Industry

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# EMPLOYMENT EXPERIENCE OF EIGHTH-GRADE GRADUATES

ONE of the most basic problems facing youth especially in a depression is that of getting and keeping a job. The change from a student status to a wage-earning status is quite difficult for some young people. In the report 1 of a recent Works Progress Administration investigation made at the request of the National Youth Administration, attention is focused on the transition of urban young people from school to industry.

To get an accurate sample of urban young people, eighth-grade graduates of both public and parochial schools, for the scholastic years 1928–29, 1930–31, and 1932–33, were selected for analysis. The field work was conducted in the summer and fall of 1938 in 7 cities (Binghamton, N. Y., Birmingham, Denver, Duluth, St. Louis, San Francisco, and Seattle), as fairly representative of American cities with populations ranging from 25,000 to 1,000,000. More than 40,000 youth were included and about 30,000 detailed work histories were secured. Approximately 77 percent of all the young people interviewed were employed or seeking work at the time of the survey.

According to these work histories, some youth had little difficulty in making the transition from school to industry. Others, however, after years of job seeking were still unemployed. Still others had temporary jobs or "dead-end" employment, or were working for substandard wages. Many of these employed youth were dissatisfied and were seeking other work. These, as well as the young people without any jobs, constitute a real problem in adjustment.

#### Education

Almost 40 percent of the young persons interviewed had not completed a high-school education. Only 62 percent had continued their studies long enough to receive a high-school diploma; and only 17 percent had had 1 year or more of college. Nearly one-half (48 percent) of the youth reported lack of funds as the major reason for leaving school.

<sup>&</sup>lt;sup>1</sup> Works Progress Administration. Division of Research. Urban Youth: Their Characteristics and Economic Problems—a Preliminary Report of the Survey of Youth and the Labor Market. Washington, 1939. (Series I, No. 24.)

Approximately nine-tenths of the children of professional persons were at least high-school graduates, while only 44 percent of the children of unskilled workers had completed high school, as shown in table 1.

Table 1.—Years of School Completed by Youth in 7 Cities, by Occupation of Father

Occupation of father	Number											
Occupation of facility	of youth	Total	8	9	10	11	12	13-15	16 or more			
All occupations	1 29, 966	100	11	8	10	10	44	14	-			
Professional persons	1, 323	100	2	2	3	5	36	41	1			
cluding farmers	5, 756	100	7	5	8 6	8	44	23				
Clerks and kindred workers	4,064	100	4	4		9	50	23				
Skilled workers and foremen	6,929	100	11	9	11	11	47	9				
Semiskilled workers	4, 809	100	16	10	13	10	44	6				
Unskilled workers	2, 470	100	18	12	15	11	39	5	(3)			
Servant classes	965	100	10	11	14	11	43	6 5 10	1 1			
Father not family head 1	3, 539	100	14	9	12	11	41	10				
Not reported	111	100	15	11	14	12	40	8				

1 Excludes 2 youth whose number of years of school completed was not reported.

Less than 0.5 percent.
Father not in family for 10 years or more.

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### Securing of Jobs

Friends, relatives, and personal applications were the sources of information accounting for 65 percent of all jobs secured by the young people surveyed. Friendship with a former employer was cited as a source of information for 17 percent of the jobs which had been held. Public, private, and school employment agencies were reported as accounting for 8 percent, and newspaper ads and articles, unions, and Government personnel offices for only 4 percent, of the jobs obtained.

Lack of previous employment experience was the most important factor reported by the young people who stated that they had special personal difficulties in getting jobs. Sixty-three percent of the girls and 44 percent of the boys who replied to the question regarding such difficulties cited inexperience as an obstacle to employment.

### Principal Occupations

In 1938, almost three-fourths of 24,517 youth in 7 cities were reported in two broad occupational groups—"Clerks and kindred workers" and "Semiskilled workers," as shown in table 2.

Table 2.—Percentage Distribution of Youth in Seven Cities, 1938, by Occupation at Time of Last Employment

Occupation at time of last employment	Both sexes	Male	Female
Number of youth who had had private jobs	24, 517	12, 440	12,07
Professional persons. Proprietors, managers and officials, including farmers. Clerks and kindred workers. Skilled workers and foremen. Semiskilled workers. Unskilled workers. Servant classes.	3 3 44 3 30 6	3 4 35 6 35 12 5	(1) 5 (1) 2 (1) 1
Total	100	100	1

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1 Less than 0.5 percent.

### Unemployment

Variations in the definition of unemployment make the unemployment reported in the present study incomparable with that found by earlier youth surveys, but it is evident that fewer young people were unemployed in 1938 than in the period of deepest depression. The 1935 surveys by the United States Office of Education showed 32 percent of persons 19 to 24 years of age unemployed, and the 1936 Maryland survey revealed 18 percent in that age group with the same status. According to the 1938 inquiry here reviewed, 14 percent of all young persons, and 20 percent of the labor-market youth, were unemployed. Eleven percent of all the young people had had no work at all and were actively looking for jobs; 2 percent were on Government projects; and 1 percent had been temporarily laid off or were on strike at the time of interview.

### Earnings and Hours of Work

In 1938, young people at work in the 7 cities surveyed were paid on an average of \$17.19 per week, males averaging \$19.66 and females \$14.88. These findings are based only on private employment of 15 or more hours a week which the young people had at the time of interview, or, if they were not working at that time, on the last jobs that they had held in 1938. The weekly earnings of approximately 72 percent of the young men and 97 percent of the young women were under \$25. Exclusive of part-time employment of less than 15 hours per week, the young people when employed averaged 43 hours per week.

Hours worked.—Employed youth were not in most cases working an excessive number of hours per week. Excluding part-time employment of less than 15 hours per week, the workweek of youth, when employed, averaged 43 hours. However, 43 percent of the young men and 34 percent of the young women who had jobs in 1938 worked more than 44 hours per week, which has been designated the maximum for industries covered by the Fair Labor Standards (Wage-Hour) Act. Since nearly all of the youth were interviewed before the act became effective, this survey can offer no data on the effects of the Fair Labor Standards Act.

#### Youth Not in the Labor Market

Over two-fifths (44 percent) of all youth surveyed were outside of private employment at the time of interview, some being unemployed, but many being completely out of the labor market. Eleven percent were in school, most of these being in college or in vocational schools. Many of these students, however, were able to go on with their education only through summer or part-time jobs, NYA earnings, or scholarships. Another 11 percent of all the young people interviewed (23 per cent of the girls interviewed) were housewives, who were not in the labor market. Seven percent of those interviewed were doing unpaid family work or assisting with housework at home, were on unpaid vacations, were "loafing," or were ill.

### Comparison by Cities

Figures on the status of youth in each of the 7 cities included in the survey are given in table 3. Seattle had the highest percentage of youth who completed high school. The proportion of young people unemployed in Denver at the time of interview was not so high as in any of the other cities surveyed. The employed youth of San Francisco received higher wages than young people in the other cities.

Birmingham Negro youth were the hardest-hit group during the depression, 71 percent having to leave school for financial reasons. Only 11 percent of the young Negroes who had been continuously in the labor market had escaped unemployment or periods when they worked less than 15 hours per week. At the time they were interviewed, the percentage without jobs was much higher than the percentage unemployed in the white Birmingham group. Whatever the causes may be for these differentials, it is obvious that "Negro youth are subject to tremendous handicaps."

The St. Louis youth had less education and entered the labor market younger than the young people in any other of the seven cities. With the exception of the Birmingham Negro youth, the Denver young people left school for financial reasons in the highest proportion of cases. Both at the time of interview and in the past, Duluth's young people had more unemployment and lower wages than any city group, with the exception of the Birmingham Negro youth.

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Table 3.—Intercity Differences in Education, Unemployment, and Earnings of Youth

		of youth	Percent	of labor-mar who—	ket youth	
City	Finished high school	Quit school for financial reasons	Entered labor market at 17 or younger	Were continuously employed at private jobs of 15 hours or more per week	Were currently un-	Average weekly earnings of employed youth
All cities	62	48	31	31	20	\$17.1
Binghamton Birmingham, white Birmingham, Negro Denver Duluth St. Louis San Francisco Seattle	52 60 46 67 68 43 69 80	46 50 71 51 44 50 38 48	31 26 38 31 19 53 24 15	35 31 11 44 24 30 28 31	17 22 31 16 26 19 19	16. 9 16. 1 7. 9 16. 5 15. 6 16. 3 20. 0 18. 5

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Few of these depression youth experienced the more prosperous days of the 1920's. Perhaps partly as a result of this fact, unemployment and low wages have not caused widespread social unrest among youth. Continued insecurity, however, may increase the dissatisfaction of youth and reduce their respect for the economic system of this country. Unemployment and low wages, if long continued, will certainly affect the attitudes of many youth toward the social structure. Youth are unlikely to retain their respect for society if they continue to receive so few opportunities to make use of their abilities, both for their own welfare and for the best interests of the nation as a whole.

The investigators conclude that if lack of education, unemployment, and low wages are to continue to be the portion of youth, the Nation will probably be handicapped in the future by a supply of untrained labor and by an inadequately informed citizenry.

## PROHIBITION OF CHILD LABOR IN FACTORIES IN INDIA

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THE employment of children under 12 years of age in certain industries in India has been prohibited by an act assented to by the Governor General on April 8, 1939, amending the 1938 Employment of Children Act. The act is not applicable to enterprises carried on by the operator with the aid of his family only, nor to schools established by or receiving aid or recognition from the government of a Province.

The law also provides that before work is begun in any of the processes described, the employer interested must notify the inspector in writing. If the employer and the inspector do not agree concerning the age of a child who has no age certificate issued by a prescribed medical authority, the case must be referred to such authority for a ruling.

<sup>&</sup>lt;sup>1</sup> International Labor Office. Industrial and Labor Information, Geneva, August 28, 1939, p. 286.

### PROTECTION OF CHILD WORKERS IN SHANGHAI

THE elimination of child labor in the silk filatures of the International Settlement of Shanghai <sup>1</sup> has been undertaken by the industrial section of the municipal council of that city. In the silk filatures of Shanghai, the "beating" of cocoons in water to separate the fibers is ordinarily done by hand, and such work is assigned to children. In establishments using this old method, the industrial section insists that children under 4 feet 8 inches in height are not to be employed. Its efforts met with some success in the year 1938, according to the report.

Furthermore, the industrial section of the council emphasizes the fact that children constitute a most unstable working force and that it would be to management's advantage to find some substitute for their labor. When new filatures began to operate in the last 6 months of 1938, the section proposed that modern slow-reeling machinery be installed and that automatic stirrers be used, thus doing away with child labor. These efforts resulted in some progress in the early part of 1939, slow-reeling machinery being set up in three plants and automatic stirrers in two. Daily production in one plant using the automatic stirrer was reported to be in excess of that in plants using child labor.

<sup>1</sup> International Labor Office. Industrial and Labor Information, Geneva, August 28, 1939, p. 285.

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#### WAGE WORKERS AND SHARECROPPERS ON MISSISSIPPI PLANTATIONS

HIRED farm workers are to a large extent concentrated on a comparatively few farms and these farms are located mainly in limited areas of the country. However, recent trends in many sections of the country indicate an increased use of hired workers in place of tenants. In the plantation regions of the South, sharecroppers have formed a distinctive group of farm workers, but in addition to sharecroppers in these areas there have been considerable numbers of hired farm workers. Evidence of a trend toward hired labor in one of the principal areas of sharecropping is presented in a recent study by the United States Department of Agriculture in cooperation with the Mississippi Agricultural Experiment Station.<sup>1</sup>

In this region, the Yazoo-Mississippi Delta area, large cotton plantations prevail, ranging in size from 400 to several thousand acres. These plantations are operated largely by tenants. The area comprises about 4,200,000 acres in northwestern Mississippi and includes all of 10 counties and parts of 9 others. In 1934 about 69 percent of the farm land in the 10 counties wholly within the area was in plantations of 400 acres or more, and 62 percent was operated by tenants, only 13 percent of whom were white. Fluctuations in cotton prices, the advantages of mechanization, and other influences during the past decade led planters to make readjustments in plantation organization and operation for maintenance of earnings. These adjustments included an increased use of wage labor. Because of the fact that all share-rental leases on plantations are verbal agreements that may be terminated at the end of the year either by the plantation operator or by the tenant, shifts from one employment status to another are easily made.

During recent years, there has been indication that a plentiful supply of labor and the increased use of large-scale equipment in production have been associated with a rapid increase in the use of wage labor as compared with share labor. The use of large-scale machinery in cotton production, associated with the

<sup>&</sup>lt;sup>1</sup> U. S. Department of Agriculture. Technical Bulletin No. 682: Plantation Organization and Operation in the Yazoo-Mississippi Delta Area, by E. L. Langsford and B. H. Thibodeaux. Washington, May 1939. Recent articles in the Monthly Labor Review dealing in whole or in part with this subject include Distribution of Hired Farm Laborers in the United States, September 1937 (reprinted as Serial No. R. 625); Power Farming and Labor Displacement in the Cotton Belt, 1937, March and April 1938 (reprinted as Serial No. R. 737); and Farm Employment, 1909 to 1938, June 1939 (reprinted as Serial No. R. 976).

availability of a plentiful and relatively low-priced labor supply for hand operations like hoeing and picking, has proved much more remunerative to plantation operators than production on a share basis. Together with this advantage in large-scale production methods are the attendant reduction in the number of laborers used and hence the decreased risks in furnishing credit advances to tenants.

A study of 12 plantations on which detailed records were kept indicates that the proportion of cropland operated with wage labor rose from 30 percent in 1933 to 47 percent in 1936. The proportion operated by sharecroppers fell from 52 percent in 1933 to 43 percent in 1936, and the proportion operated with share tenants if fell from 18 percent in 1933 to 10 percent in 1936. A more intensive survey of plantations in one county indicates an increase of cotton acreage operated by wage labor from 27 percent in 1934 to 42 percent in 1936; a decline of the acreage operated by sharecroppers from 58 to 48 percent; and a reduction of the acreage operated by share tenants from 12 to 9 percent.

Census data for the 10 counties wholly within the area indicate a similar trend between 1930 and 1935. The acreage in cropland harvested per farm operator by full owners, part owners, and managers increased from about 55 acres in 1930 to 81 acres in 1935. The number of full owners, part owners, and managers increased from 4,084 in 1930 to 5,150 in 1935, and in contrast the number of share-croppers and other tenants decreased from 75,988 in 1930 to 63,113 in 1935. The total farm land increased from 2,284,000 acres in 1930 to 2,459,000 acres in 1935, and the cropland harvested underwent a slight reduction from 1,684,000 acres in 1930 to 1,658,000 acres in 1935.

The relative costs of the different types of labor to plantation operators, and the comparative incomes of sharecroppers, share tenants, and wage workers, afford explanations of these changes.

In 1932, sharecroppers earned an average net return of 45 cents per workday. In effect, this was the average rate, excluding perquisites furnished sharecroppers, that the plantation operator paid for a day of sharecropper labor. If wage labor had been used, the labor cost to the operator would have amounted to 60 cents per day. Thus wage-labor rates were relatively high as compared with crop incomes in 1932, and the plantation operator benefited more that year from using sharecroppers than wage laborers. This income-wage relationship was reversed, however, during the next 4 years. In each of these years, the average net earnings per day of sharecropper labor were substantially above the average rate per day for wage labor; hence, on the average, the plantation operator benefited more from using wage labor than sharecropper labor during these 4 years.

It is probable that the policy of substituting wage labor for sharecropper and tenant labor will be continued and extended, for wage

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<sup>&</sup>lt;sup>3</sup> In the study here reviewed a sharecropper is defined as a tenant who furnishes all of the labor, bears one-half of the expenses for fertilizer, poison, and ginning, and receives one-half of the crop. The sharecropper is sometimes locally referred to as a "half hand" or "half tenant." A share tenant is defined as a tenant who furnishes all of the labor, power and equipment, and seed, and bears three-fourths of the expenses for fertilizer, poison, and ginning, in return for three-fourths of the crop. A local term for share tenant is "fourth tenant."

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labor can be adapted most readily and economically to mechanization now in progress. The extent and rapidity of the change will depend on the relative levels of crop incomes, labor costs, and power costs. These in turn will be vitally affected by the degree of success attained in mechanizing the hoeing and picking of cotton. Another factor of unforeseeable importance is the bargaining power of the workers regarding wages and the tenure status they prefer.

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### MIGRATION INTO OREGON, 1930-37

THE population of Oregon is expanding—mainly through interstate migration. As many, if not more, new people seem to be entering the State each year as were received in the decade 1920 to 1930. Some 200,000 migrants from other States probably went into Oregon in the 7½ years from 1930 to June 30, 1937, according to a recent sample study, covering 115,400 migrants for that period. The study was sponsored by the Oregon State Planning Board with the cooperation of the National Resources Committee and the Works Progress Administration.<sup>1</sup>

Notwithstanding the slowing down of population growth in the Nation as a whole, the movement into the Pacific Northwest seems likely to continue for a considerable time. This migration has fluctuated from year to year, but was notably heavy from 1920 to 1930 and after 1934. People seemed to be more inclined "to take a chance," when economic prosperity was on the upgrade. Numerous migrants went into Oregon from the States of the Northern Great Plains in 1935 and 1936. However, over two-thirds of the recent migration covered in this survey was from other States.

The migration into Oregon appears to be the result of the following four movements:

1. A remnant of the general westward population drift.

2. Waves or peaks caused by adverse climatic or economic conditions in other regions.

3. Movement of migratory farm labor up and down the Pacific Coast.

4. Normal movements of people between adjoining States.

The general trend of the population on the Pacific Coast is apparently from North to South. From 1920 to 1930, Oregon made some gains in exchanges of natives with Washington, but these were more than offset by exchanges with California. The turn-over in the Oregon population is relatively high, one person leaving the State for every two entering it. Since 1930, migrants into Oregon have been from practically the same States as in the period from 1920 to 1930. Eighty-four percent of the recent migration was from

Oregon. State Planning Board. Migration into Oregon, 1930-37: Vol. II, Sources and Characteristics of Migrants. By V. B. Stanbery. Portland, Oreg., 1939.

14 States—3 adjoining, 4 North Central, and 7 northern Great Plains States.

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The tendency is for people to move directly from east to west—the shorter the distance, the greater the number moving. The newcomers in Oregon are concentrated in certain sections, especially in the Willamette Valley, Coastal, and Klamath areas.

Migrants are inclined to seek localities similar to the environment they have left, or those especially desirable for particular reasons. Newcomers to Oregon from the Great Plains States flocked to the humid regions in the western part of the State, while those from the northeastern industrial States settled in the larger cities. Many from the Southwestern States went to the irrigated sections in the east of Oregon.

The recent heavy migration has not been merely a movement of families into rural areas. More than one-half of the migrants have gone into Oregon's cities and towns. Most of those in Portland went directly to that city—only a few attempted to settle elsewhere first.

Although no constant ratio between the size of a city and the number of migrants could be found, in general, the larger the city the more persons it received. In proportion to their size, Oregon's smaller cities of Klamath Falls, Eugene, Medford, Salem, Corvallis, Albany, Oregon City, and The Dalles have grown more rapidly from migration since 1930 than Portland. Portland also is growing.

### Characteristics of Migrants

The average number of children in migrant families who have children in school is higher per family than in resident families. Migrant families now on relief are also larger, on the average, than relief resident families.

Because of the predominance of single workers among the migrants registering for jobs in the larger cities of Oregon, their family-type distribution was quite different from that in the State's population. In the cities, single persons registering for work constituted approximately 50 percent, and 2-person and larger families each 25 percent, of the total.

The percentage of single migrants is on the increase, having been higher in 1937 than in 1930. Unemployment relief, social security, and like programs have apparently tended to reduce the number of older migrants with larger families. Migrant registrants for employment in Oregon were mainly in the 20–44 age group. Approximately 85 percent were under 45 at the time they entered the State. Their average age is considerably under that of the Oregon resident registrants for employment, and this helps to retard the rapid aging of the gainfully working population of the State. The age distribution of the migrant workers also differed substantially from that of resident Oregonians applying for jobs through the Employment Service of the

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State. Single migrant workers, and those having only one dependent. were not so old as those with two or more dependents. Migrant workers in the cities of Oregon were on the average younger than those who were outside of the cities.

The newcomers into the State are well distributed in the same occupational groups as the resident workers. Probably less than 40 percent had formerly followed strictly rural occupations. Consequently, the opening up of additional farms through the development of the land will not meet the requirements of those previously having urban employment.

A high percentage of migrants in the 15 largest cities of the State were professional workers and sales persons. Fifty percent of all migrant workers covered in this study were in the following eight occupations: Laborers, truck drivers, farm hands, salesmen, carpenters. operators, farmers, and mechanics. The others were distributed

among various occupations.

Notwithstanding the great fluctuations in the number of migrants annually entering the State, the age and occupational distributions of those registering for jobs have remained constant each year for each

type of family.

Migration difficulties and problems are immediate, while the benefits are, in general, "long range and cumulative, both for the individual migrant and for the State." At times Oregon may have a disadvantageous balance of trade in commodities and finance, but its balance in exchanges of population has always been strongly favorable.

### OCCUPATIONAL SHIFTS OF MARYLAND WORKERS IN DEPRESSION

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DURING the depression there was a considerable shift in the occupations of heads of households in Maryland. The accompanying table shows the shifts from the usual job to the one held during the first week of July 1936. Many of the workers who reported types of occupation at that time which differed from their usual occupations were temporarily employed. Others reporting such changes may have made permanent shifts into new fields of activity.1

<sup>&</sup>lt;sup>1</sup> University of Maryland. Comparative Study of Certain Relief and Nonrelief Households in Selected Areas of Rural Maryland. By Theodore B. Manny and Harry G. Clowes. Cooperating Agencies: U.S. Works Progress Administration and Maryland Works Progress Administration. College Park, Md.,

Shifts During Depression From Usual Occupations of Heads of Households in Selected Areas of Maryland, by Race

		Nun	nber of	heads of	housel	nolds w	hose usu	ial occ	upation	ns 1 we	re—
			Pr	roprietors					Unsk wor	illed kers	
Present occupation 1	Total	Pro- fes- sional per- sons	Farm-ers	Whole-sale and retail	Other proprietors, etc.	Clerks and kin- dred work- ers	Skilled work- ers and fore- men	skill- ed	Farm	Other un- skill- ed work- ers and ser- vants	ed
White											
All household heads	646	7	203	12	16	17	73	80	55	182	1
Professional persons Proprietors: Farmers (owners, ten-	5	5	0	0	0	0	0	0	0	0	(
ants, croppers)	197	1	180	1	2	2	3	0	5	3	(
Wholesale and retail dealers	9	0	0	8	0	0	0	0	1	0	(
Other proprietors, managers, officials	13	0	0	2	10	0	0	0	0	1	
ersskilled workers and fore-	12	0	0	0	1	8	1	1	0	1	1
men Semiskilled workers Unskilled workers:	51 94	0	3 3	0	0	0	41 17	2 55	1 3	15 15	
Farm laborersOther unskilled work-	33	0	1	0	0	0	1	2	24	5	
ers and servants Not working or never	211	1	15	0	2	5	7	14	21	146	
worked	21	0	1	1	0	0	3	6	0	9	
Negro											
All household heads	142	1	40	0	1	0	7	11	24	58	
Professional persons Proprietors: Farmers (owners, ten-	0	0	0	0	0	0	0	0	0	0	
ants, croppers)	40		39	0	0	0	0	0	0	1	
dealersOther proprietors.	0	0	0	0	0	0	0	0	0	0	
managers, officials Clerks and kindred work-	1		0	0	1	0	0	0	0	0	
ers Skilled workers and fore-	0		0	0	0	0	0	0	0	0	
men. Semiskilled workers. Unskilled workers:	13		0	0	0	0		10		0 2	
Farm laborersOther unskilled work-	11	0	0	0	0	0	0	0	10	1	
ers and servants Not working or never	67	0	1	0	0	0	0	1	14	51	
worked	4	1	0	0	0	0	0	0	0	3	

<sup>1 &</sup>quot;Present occupation" is defined as that type of occupation in which the person was employed the first week of July 1936, whereas "usual occupation" designated that type of occupation in which the person worked the longest period of time between July 1, 1926, and June 30, 1936.

Based on the number of household heads for which employment throughout the decade 1926-36 is reported, farming was the most stable occupation. Greater permanence in employment was a characteristic of all farm operators (croppers, tenants, and owners) except white farm laborers, among whom a considerable number of shifts occurred. Such a condition may usually be expected in a section

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Selected : U.S. where farm tenancy is not excessive and the number of depression farm foreclosures is not great. Seventeen white heads of households began to operate farms between 1926 and 1936, leaving what was reported as their usual field of work. Relatively fewer farm laborers continued to follow their usual occupations during the decade under review, compared with farm laborers who engaged in other work. Some heads of households became farm laborers.

A number of shifts are recorded among the household heads whose usual employment was in the white-collar group, but whose present occupations were not in that group. Most of the significant transfers from the skilled-labor group were made to the semiskilled and unskilled occupations. Obviously, occupational shifts in periods of depression are mainly in a downward direction.

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The relatively small number of Negro household heads reported

proportionately fewer shifts.

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## INJURY EXPERIENCE IN THE IRON AND STEEL INDUSTRY, 1937 AND 1938 <sup>1</sup>

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#### Summary

INJURY rates of the iron and steel industry decreased in 1938, as shown by reports to the Bureau of Labor Statistics from 1,778 identical departments of firms reporting in both years. The frequency rate declined from 14.93 to 11.28, and the severity rate from 2.16 to 2.11.2 As indicated by the much greater decrease in the severity rate than in the frequency rate, there was an increase in the proportion of serious accidents. Thus, the ratio of fatalities and permanent total disabilities per thousand injuries increased from 11 in 1937 to 15 in 1938. Similarly, the number of permanent partial disabilities per thousand injuries rose from 65 to 82. The trend toward more serious disabilities was also reflected in the increase of the average time loss per temporary total disability, which rose from 25 days in 1937 to 33 days in 1938.

Table 1.—Summary of Injury Data for 1,778 Identical Departments in the Iron and Steel Industry, 1937 and 1938

Item	1938	1937	Percent of change, 1937 to 1938
Total employee-hours of exposure (in thousands) Total number of injuries Total days of disability Frequency rate Severity rate.	602, 620	1,069,638	-43, 7
	6, 797	15,974	-57, 4
	1, 270, 993	2,308,983	-45, 0
	11, 28	14,93	-24, 4
	2, 11	2,16	-2, 3

Although employee-hours decreased sharply in 1938, the total number of disabling injuries declined more rapidly than did hours of exposure, resulting in a decrease of 24.4 percent in the frequency rate. Similarly, the total days of disability declined faster than did employee-hours, resulting in a 2.3 percent decrease in the severity rate. The summary of all departments combined shows a decrease in the total

<sup>&</sup>lt;sup>1</sup> This article was prepared by Roy F. Fleming, Bureau of Labor Statistics, under the direction of Swen Kjaer.

<sup>&</sup>lt;sup>3</sup> The frequency rate is the average number of disabling injuries for each million employee-hours worked. The severity rate is the average number of days lost for each thousand employee-hours worked. The standard time-loss ratings for fatalities and permanent disabilities are given in Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1937.

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employee-hours worked from 1,069,638,000 to 602,620,000, in the total disabling injuries from 15,974 to 6,797, and in the total days lost from 2,308,983 to 1,270,993. Of 6,797 disabling injuries reported in 1938 there were 94 deaths, 5 permanent total disabilities, 554 per. manent partial disabilities, and 6,144 temporary total disabilities,

### Injury Experience, by Department

Table 2 gives, by departments grouped into four classes (melting and rolling, finishing, service and maintenance, and those not elsewhere classified), the detailed injury data and the resulting injury rates of the industry in 1938 and 1937.

Table 2.—Injuries and Injury Rates for 1,778 Identical Departments in the Iron and Steel Industry, 1937 and 1938

			1	Number (	of injur	68				
	Num-	Em-		Res	ulting is	n-	m			
Departmen <del>t</del>	ber of de- part- ments	of de-	ployee- hours (in thou- sands)	Total	Death and perma- nent total disa- bility 1	Per- ma- nent partial disa- bility	Tem- porary total disa- bility	Total time lost (days)	Frequency rate	Se- verity rate
					1938					
All departments 8	1, 778	602, 620	6, 797	(5) 99	554	6, 144	1,270,993	11. 28	2.1	
Melting and rolling Bessemer converters. Blast furnaces. Electric furnaces. Open-hearth furnaces. Bar mills. Cold reduction. Cold rolling mills. Heavy-rolling mills. Light-rolling mills. Plate mills. Rod mills. Sheet mills. Strip mills. Tube mills. Miscellaneous. Crucible furnaces. Puddling mills.	57 30 69 17 11 16 50 19 52 23 36 18 38 5	214, 562 3, 249 20, 525 3, 255 27, 815 4, 189 8, 087 5, 294 27, 247 11, 398 18, 463 8, 939 20, 984 12, 144 38, 654 340 2 339	2,000 30 136 62 200 31 60 107 181 197 197 65 23 206 90 406 9	(1) 32 2 4 2 2 8 8 3 1 (1) 2 1 7	222 2 13 3 24 8 13 6 28 11 22 11 12 24 19 33	1, 746 28 121 59 172 23 45 99 145 186 172 53 18 18 9 9	459, 892 2, 033 37, 020 2, 580 56, 779 3, 983 22, 689 20, 183 87, 821 9, 148 41, 749 17, 806 2, 248 52, 995 23, 183 79, 572 103	9. 32 9. 23 6. 63 19. 05 7. 19 7. 40 20. 21 6. 64 17. 28 10. 67 7. 27 5. 78 9. 82 7. 41	2. 1. 2. 1. 2.	
Finishing	4 36 28 16 114 137 145 35 12 37 46 15		3, 340 16 206 88 52 652 680 966 146 11 177 264 666 16	(4) 29 1 1 6 1 (4) 16 2	198 1 15 4 40 29 41 17 1 19 27 3	3, 113 15 191 87 47 606 650 909 127 10 158 236 63	416, 331 572 19, 092 8, 382 9, 929 81, 696 45, 816 157, 502 36, 712 614 16, 140 29, 951 1, 740 8, 185	12.53 20.11	1. 1. 3. 2. 1. 3. 2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	

<sup>1</sup> Figures in parentheses show the number of permanent total-disability cases included.

<sup>2</sup> The frequency rate is the average number of disabling injuries for each million employee-hours worked. The severity rate is the average number of days lost for each thousand employee-hours worked. The standard time-loss ratings for fatalities and permanent disabilities are those approved by the American Standards Association, 1937.

<sup>3</sup> Except coke-oven and erection departments.

Table 2.—Injuries and Injury Rates for 1,778 Identical Departments in the Iron and Steel Industry, 1937 and 1938—Continued

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2. 14 .63 1. 80 .79 2. 04 .95 2. 81 3. 22 .80 2. 26 1. 99 .57 2. 53 1. 91 2. 06

8 2.34 0 .92 6 1.37 4 1.99 7 3.05 1 2.67 0 1.57 0 2.67 1 2.09 1 2.09 1 3.99 1 2.09 1 3.99 1 4.39 1 5.30

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			1	Number of	of injuri	es			
	Num-	Em-		Res	ulting fr	n—	Total	Fre-	
Department	ber of de- part- ments	ployee- hours (in thou- sands)	Total	Death and perma- nent total disa- bility	Per- ma- nent partial disa- bility	Tem- porary total disa- bility	Total time lost (days)	quen- cy rate	Se- verity rate
				1938	-Conti	nued			
Service and maintenance Clerical and sales Electrical Mechanical	478 180 58 137	110, 899 19, 489 12, 331 62, 536	619 22 49 442	22 5 9	74 2 7 59	523 20 37 374	224, 581 6, 319 35, 545 119, 171	5. 58 1. 13 3. 97 7. 07	2.03 .32 2.88 1.91
Ore docks and yards Power houses Yards and transportation	4 20 79	4, 016 12, 249	11 95	1 7	1 5	9 83	7, 059 56, 487	2.74 7.76	1.76 4.61
Not elsewhere classified Coke ovens Erecting	185 26 4	99, 288 11, 589 3, 732	838 33 375	16 2 (1) 8	60 6 16	762 25 351	170, 189 22, 246 87, 898	3. 44 2. 85 100. 49	1.71 1.92 23.55
	-		1	1	1937	1	1	1	
All departments 3	1,778	1,069,638	15,974	(12) 173	1, 036	14, 765	2,308,983	14. 93	2. 16
Meiting and rolling  Bessemer converters  Blast furnaces  Electric furnaces Open-hearth furnaces Bar mills  Cold reduction Cold rolling Heavy-rolling mills Hot mills Light-rolling mills Plate mills Rod mills Sheet mills Strip mills Tube mills Miscellaneous Crucible furnaces Puddling mills  Finishing	12 57 30 69 17 11 16 50 19 52 23 36 18 38 5	381, 827 5, 881 35, 904 5, 102 49, 574 7, 268 11, 225 8, 506 52, 069 23, 029 30, 707 17, 065 6, 474 43, 349 21, 066 63, 930 677 5		(4) 42		63	773, 263 40, 276 85, 595 29, 882 156, 038 10, 675 39, 170 11, 855 86, 395 10, 111 53, 388 24, 442 13, 896 64, 622 63, 788 82, 099 1, 031 1, 013		
Finishing  Axle works  Bolts and nuts  Car wheels  Cold drawing  Fabricating shops  Forge shops  Foundries  Galvanizing and tinning  Nails and staples  Stamping  Wire drawing  Wire springs  Woven-wire fence	36 28 16 114 137 145 35 12 37 46	60, 807 59, 537 88, 506 33, 748 2, 167 15, 097 29, 654 7, 214	34 415 224 169 1, 369 1, 758 3, 408 258 17 466 409 156	(1) 9 (1) 6 (2) 25	14 4 87 74 136 25 2 28	165 1, 273 1, 678 3, 247 233 15 438 370	34, 025 54, 821 3, 901	19. 19 20. 19 39. 57 31. 20 22. 51 29. 53 38. 51 7. 64 7. 85 30. 87 13. 79 21. 63	1. 44 2. 83 2. 44 2. 06 3. 74 9. 1. 66 2. 24 1. 8
Service and maintenance Clerical and sales Electrical Mechanical Ore docks and yards Power houses Yards and transportation	180 58 137 4	23, 606 20, 104 102, 815 528 5, 827	20 118 953 3 45	10 19	1 11 110 1 1 2	19 97 824 2 36	873 75, 014 242, 472 1, 285 45, 658	5. 85 5. 87 9. 27 5. 68 7. 72	3.7 2.3 2.4 7.8
Not elsewhere classified Coke ovens Erecting	26	19, 646	76	2	10	64	30, 358	3.87	1.5

<sup>\*</sup> Except coke-oven and erection departments.

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Melting and rolling.—For all departments in the melting and rolling class the employee-hours worked decreased from 381,827,000 in 1937 to 214,562,000 in 1938, while the total number of injuries decreased from 4,165 to 2,000, declines of 43.8 percent and 52.0 percent, respectively. As a result, the frequency rate decreased from 10.91 to 9.32. The severity rate, however, increased slightly from 2.03 to 2.14.

The cold-rolling departments, with a frequency rate of 20.21 and a severity rate of 3.81, ranked highest in both rates among the individual department groups in the melting and rolling class in 1938. These rates also represent substantial increases over those of 1937, which were 16.58 for frequency and 1.39 for severity. The only other large increase in the frequency rate occurred in hot-mill depart.

ments, the rate rising from 12.77 to 17.28.

Of the 15 melting and rolling departments, 11 experienced lower frequency rates in 1938 than in 1937. Probably the most noteworthy decrease in both injury rates occurred in the electric-furnace departments. The frequency rate was more than halved, from 45.28 to 19.05. The severity rate fell from 5.86 to 0.79, due principally to the absence of fatal injuries in 1938. Other departments having substantially lower frequency rates in 1938 than in 1937 were blast furnaces (8.97 to 6.63), open-hearth furnaces (11.16 to 7.19), cold reduction (10.60 to 7.42), light-rolling mills (13.03 to 10.67), rod mills (10.66 to 5.78), and strip mills (11.87 to 7.41).

The rod-mill departments ranked lowest in both injury rates in 1938, with a frequency rate of 5.78 and a severity rate of 0.57. Very low frequency rates were also experienced by blast furnaces, with a rate of 6.63, and heavy-rolling mills, with 6.64. Although the severity rate increased for the melting and rolling class as a whole, the data reveal no general rise among the individual department groups. The bessemer-converter departments had the outstanding decrease in the

severity rate, which fell from 6.85 in 1937 to 0.63 in 1938.

Finishing.—The departments in the finishing class as a group ranked highest in both frequency and severity of injuries. Nevertheless, the 1938 frequency rate of 18.78 represented a large reduction from that of 26.21 in 1937. The severity rate of this class, however, remained practically unchanged, 2.35 in 1937 and 2.34 in 1938.

All but 2 of the 13 finishing departments experienced decreases in their frequency rates. For example, the frequency rate of the bolt and nut departments dropped from 20.19 to 14.76, cold drawing from 31.20 to 15.97, forge shops from 29.53 to 22.40, foundries from 38.51 to 24.44, stamping from 30.87 to 17.83, and woven-wire fence from 13.75 to 8.22. The reduction of the 1937 frequency rate of car-wheel departments from 39.57 to 20.94 was the outstanding decrease in this class in 1938.

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Axle-work departments ranked highest in the frequency rate in 1938, with a rate of 25.60, a substantial increase over that of 19.19 in 1937. The only other increase in the frequency rate occurred in the galvanizing and tinning departments, from 7.64 to 8.31. Both of these departments also had increases in their severity rates. Departments ranking low in frequency rates in 1938 were nails and staples with 7.03, woven-wire fence with 8.22, and galvanizing and tinning with 8.31. The woven-wire-fence departments, however, with 4.21 days lost per thousand hours worked, ranked highest in the severity rate in 1938. Foundry departments ranked a close second with a rate of 3.99.

Changes in the severity rates for the finishing departments followed no definite order. Increases and decreases occurred throughout the departments with no regard to changes in frequency rates. For example, the severity rate of the cold-drawing departments rose from 0.81 to 3.05 and that of the car-wheel departments dropped from 2.81 to 1.99, while the frequency rates of both departments decreased almost to half the 1937 rates. Low severity rates were experienced by nails and staples, 0.39, which ranked lowest, and wire springs, 0.53, which ranked second lowest.

Service and maintenance.—The departments in the service and maintenance class had fewer disabling injuries per million hours worked in 1938 than had the other three classes. The frequency rate was 5.58 in 1938 as against 7.64 in 1937. The decrease in the severity rate from 2.65 to 2.03 was the only sizable reduction registered in any class as a whole. Employee-hours worked decreased from 182,699,000 to 110,899,000, disabling injuries from 1,396 to 619, and days of disability from 484,802 to 224,581.

Ore dock and yard departments, with more than a quarter million employee-hours, operated the entire year without a disabling injury. In 1937 the frequency rate for this group was 5.68 and the severity rate 2.43. The yard and transportation departments ranked highest in both injury rates in 1938. The frequency rate decreased from 8.62 to 7.76, while the severity rate increased from 4.01 to 4.61. Low frequency rates were experienced in 1938 by the electrical departments with 3.97, powerhouses with 2.74, and clerical and sales departments with 1.13.

Because coke-oven and erecting departments do not properly fall within the iron and steel classification, although reported by several iron and steel establishments, the figures for these two departments are shown separately and are not included in the general industry data. Attention is called to the extremely high injury rates of the erecting departments, 100.49 for frequency and 23.55 for severity.

### Disability Distribution

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In table 3 are shown the number of deaths, and permanent and temporary disabilities for each thousand injuries, and the average time loss per disability. For departments having a small total number of injuries no computations are given.

Table 3.—Disability Distribution per 1,000 Injuries, and Average Days Lost, in the Iron and Steel Industry, by Departments, 1937 and 1938

		Numb	er per	1,000 in	njuries		Aver	rage day disabi	ys lost lity !	per
Department	to	and anent tal oility	Permi par disab	tial	Temp tot disab	al	par	anent tial oility	Temp tot disab	al
	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937
All departments	15	11	82	65	903	924	860	865	33	27
Melting and rolling  Bessemer converters	16	14	111	80	873	906	891	933	40	32
Blast furnaces	15	25	96	65	889	910	1, 427	1, 267	53	38
Open-hearth furnaces	20	31	120	69	860	900	1, 038	958	46	35
Cold reduction	33 19	25 7 23	217 56	176 35	750 925	799 958	662 875	850 570	46 30	35 22
Heavy-rolling mills Hot mills Light-rolling mills Plate mills 2	44 0 15	0 5	155 56 112	117 24 85	801 944 873	976 910	1, 152 441 843	946 471 888	52 23 30	30 24 31
Rod mills 2	10	7	117	80	873	913	1, 317	872	52	3
Strip mills Tube mills Miscellaneous 2	11	16 4	211 81	104 95	778 902	880 901	679 723	1, 169 697	61 37	43
Finishing	9	5	59	51	932	944	826	799	25	2
Axle works <sup>2</sup> Bolts and nuts Car wheels <sup>2</sup>	0	0	73	82	927	918	937	668	26	1
Cold drawing 2	9	7	61	64	930	929	814	744	22	2
Forge shops Foundries Galvanizing and tinning	17	3 7 0	43 42 116	42 40 97	956 941 870	955 953 903	869 972 1, 200	768 860 1,006	22 24 34	2 2
Nails and staples 2	0 4	0 7	107 102	60 88	893 894	940 905	695 452	955 675	19 50	3
Wire springs	0	0	45	38	955	962	300	400	13	
Service and maintenance	36	37	120	105	844	858	935	922	45	1
Electrical.  Mechanical.  Ore docks and yards ?	102 20	85 20	143 133	93 115	755 847	822 865	407 847	914 913	73 41	-
Yards and transportation	74	58	53	82	873	860	2, 020	969	53	-
Not elsewhere classified	19	13	72	66	909	921	768	852	37	

Each death or permanent total disability is charged with a time loss of 6,000 days.
 Computations not given because of small number of total injuries.

There were 4 more deaths and permanent total disabilities, and 17 more permanent partial disabilities, per thousand injuries in the industry as a whole in 1938 than in 1937. The ratio of fatalities increased from 11 in 1937 to 15 in 1938, and the ratio of permanent partial disabilities rose from 65 to 82. The average time lost per permanent partial disability remained practically unchanged, with 865 days in 1937 and 860 days in 1938. The average days lost per temporary total disability, however, increased sharply from 25 to 33 days.

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In nearly all respects each of the 4 classes of departments followed the general industry trend. The service and maintenance class ranked highest in 1938 in the number of deaths and permanent total disabilities per thousand injuries, although it was the only class showing a decrease in this type of disability, with a decline from 37 in 1937 to 36 in 1938. The other 3 classes of departments showed decided increases in the ratio of fatalities and permanent total disabilities. The ratio of the departments not elsewhere classified rose from 13 to 19 while that of the finishing class almost doubled, from 5 to 9.

All 4 classes of departments had increases in the number of permanent partial disabilities per thousand injuries. The two outstanding increases occurred in the melting and rolling and the service and maintenance classes. The former rose from 80 in 1937 to 111 in 1938 and the latter from 105 to 120.

The average days lost per temporary disability increased sharply in all classes in 1938 over 1937. The average for the industry as a whole rose from 25 days per case in 1937 to 33 days per case in 1938. Similarly, the average time loss per case for the melting and rolling class rose from 32 days to 40 days, finishing from 20 days to 25, service and maintenance from 37 to 45, and the departments not elsewhere classified from 27 to 37. These pronounced increases in the average days lost per temporary total injury are significant when coupled with the large decreases in the frequency rates, indicating that minor temporary injuries, i. e., injuries terminating with only a few weeks of disability, were less frequent in 1938 than in 1937.

Death and permanent total disability.—The 102 deaths per thousand injuries in the electrical departments ranked highest among the individual department groups in 1938, which also represented an increase of 17 fatalities over the 1937 ratio of 85. Nevertheless, this group was among the lowest in the rank of the frequency rate (5.87), showing that the relatively few injuries per million hours that did occur were of a serious nature. The yard and transportation departments ranked second highest in the ratio of fatalities and permanent total disabilities, with 74 in 1938, increasing from 58 in 1937. Other departments with large numbers of fatalities per thousand injuries were heavy-rolling mills with 44 in 1938 and 23 in 1937, cold reduction with 33 and 25, and mechanical with 20 in each of the 2 years. open-hearth-furnace and the blast-furnace departments had noteworthy decreases in the ratio of fatalities. The ratio of the openhearth furnaces dropped from 31 in 1937 to 20 in 1938, and that of the blast furnaces decreased from 25 to 15. Outstanding for low numbers of fatalities per thousand injuries were forge shops, wire drawing, hot mills, bolts and nuts, and stamping departments. The last three departments named had no disabilities of this type in either year.

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Permanent partial disability.—Although the service and maintenance class as a whole showed the highest number of permanent disabilities per thousand injuries, individual departments with the highest ratios are found in the melting and rolling class. Prominent among these were the cold-reduction departments, which ranked first, with 217 permanent partial disabilities in 1938 as against 176 in 1937. The largest numerical increase in permanent partial disabilities per thousand injuries was experienced in the strip-mill departments. The ratio increased by 107 such disabilities, from 104 in 1937 to 211 in 1938. The average time lost per permanent partial injury, however, dropped from 1,169 days per case to 679 days, indicating that on the average permanent partial disabilities in 1938 were less severe than in 1937. Large increases in the ratio of permanent partial disabilities in electrical and stamping departments also were compensated to some degree by decreases in the average days lost per permanent partial disability. The ratio for electrical departments rose from 93 to 143 while the average time loss fell from 914 to 407 days. The ratio of the stamping department increased from 60 to 107, but the average time loss dropped from 955 to 695 days. The only other large increase was for open-hearth-furnace departments. The ratio increased from 69 in 1937 to 120 in 1938, and was accompanied by an increase in the average time loss from 958 to 1,038.

Temporary total disability.—A large number of temporary total disabilities per thousand injuries generally reflect an injury experience composed principally of minor disabilities and but few fatal and permanent injuries. Outstanding departments showing good records in this respect in 1938 were cold rolling, hot mills, forge shops, foundries. and wire springs. All of these departments but forge shops had decreases in the temporary-total-disability ratio from those of 1937, but all except hot mills had increases in the average days lost per temporary total disability.

Unusually high average time losses per temporary total disability were experienced throughout the departments in 1938. prominent were 73 days per injury in the electrical departments, 61 days in strip mills, 51 days both in the electric furnace and the yard and transportation departments, 52 days in heavy-rolling mills, and

50 days in the wire-drawing departments.

### Experience of a Select Group of Establishments

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Table 4 and the accompanying chart give, by broad classifications of injury causes, the frequency rate of injuries in a select group of iron and steel establishments from 1913 to 1938.

In sharp contrast to the frequency rate of 11.28 for the industry as a whole during 1938, the frequency rate of this select group was 5.7, or less than half. These establishments have been prominent in accident safety and prevention work since about 1906. The steady decline in the frequency rate for this group definitely shows that many accidents can be prevented when safety work is carried out as a managerial policy.

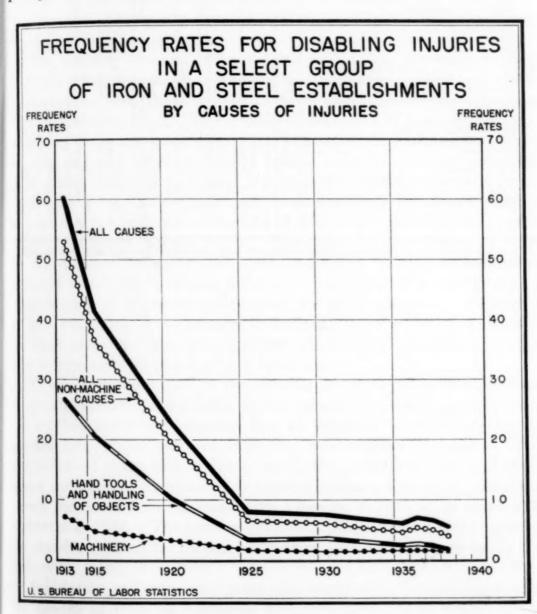


TABLE 4.—Frequency Rates for Disabling Injuries in a Select Group of Iron and Steel Establishments, 1913 to 1938, by Causes of Injuries

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Cause of injury	1913	1915	1920	1925	1930	1935	1936	1937	1938
All causes 1	60. 3	41.5	23. 1	8. 2	7.7	6. 3	7. 2	6.8	5.
Machinery		4.9	3.4	1.6	1.5	1.7	17	1 7	==
Other than cranes.	3.8	2 6	1.5	.7	. 5	. 6	. 6	2	1.
Caught In	2.5	1.7	1.0	. 5	.4	. 5	. 4	5	,
Breaking	. 1	.1	.1	(2)	(2)	(2)	(2)	(3)	(3)
Struck by load	1. 2	.8	. 4	. 2	.1	. 2	.2	.2	3.7
Hoisting apparatus	3.5	2.3	1.9	.9	1.0	1. 1	1. 1	1.0	
Overhead cranes	2.8	2.0	1.5	.7	.7	. 7	.8	.8	
Locomotive cranes		.2	. 2	.1	. 2	.3	. 2	.2	
Other	.4	.1	. 2	.1	.1	. 1	.1	1	
Vehicles	2.3	1.6	1.1	.3	. 3	.2	2	.3	,
Hot substances	5. 4	3.7	2.4	. 6	. 4	.4	. 5	. 6	
Electricity	. 5	. 2	. 3	.1	(2)	.1	(2)	(2)	(2)
Hot metal	3.6	2.3	1.7	. 4	. 3	.3	.3	.4	(.)
Steam, hot water, etc	1.3	1.2	.4	. 1	. 1	.1	. 2	.2	
Falls of persons.	4.5	3.5	2.5	1.1	1.0	1.0	1.0	.8	i
From ladders	. 3	. 1	.1	.1	(2)	.1	. 1	(2)	1
From scaffolds	. 2	. 2	. 2	. 1	.1	.1	. 1	1	1
Into openings	. 2	.1	.1	(3)	(2)	(2)	.1	(2)	(2)
Slipping or stumbling	3.8	3. 1	2.1	.9	.9	.8	.8	. 6	3.9
Falling material, not handled by injured	1.2	.7	. 2	.1	.1	(2)	. 1	(2)	
Hand tools and handling of objects.	26, 7	20.6	10.4	3, 1	3.6	2.5	28	2.5	1
Objects dropped in handling	11.2	7.6	4.4	1.6	1.9	1.0	1. 2	1.1	
Caught between material	3.4	2.6	1.3	.4	.7	. 4	. 4	. 4	
I and trucks, etc	1.9	1.4	. 6	. 2	. 2	.1	. 1	. 1	
Strain in handling	2.5	2.5	1. 1	.3	. 2	. 3	. 4	.3	
Objects flying from tools	. 2	.1	. 1	(2)	(2)	(2)	(2)	(2)	(2)
Slivers, sharp edges, etc.	3.8	3.8	1.5	.4	. 2	.4	.3	.2	(6)
Hand tools	3.7	2.6	1.4	. 5	.4	.4	.4	. 4	
Miscellaneous	12.9	6. 5	3. 1	1.1	.8	. 5	.8	.8	
Asphyxiation	.3	.1	. 1	(2)	(2)	(2)	(3)	(2)	(2)
Objects flying from material, striking								1	1 11
body	.8	. 6	. 3	.1	(2)	.1	. 1	. 1	
Objects flying from material, striking eye	2.9	1.7	1.1	.2	. 2	.1	2	.2	
Heat	.9	. 4	.1	(2)	. 1	(2)	(2)	(2)	(2)
Other	8.0	3.7	1.5	.8	. 5	.3	. 4	.5	1,

<sup>1</sup> Totals and subtotals are based on employee-hours rather than on totals of rounded individual figures.
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### Health and Industrial Hygiene

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### INDUSTRIAL DISEASES IN BRITISH FACTORIES, 1938

THE industrial-disease record in Great Britain for the year 1938 was improved over that of the previous year as regards a number of the principal causes of industrial poisoning, according to the annual report of the senior medical inspector of factories for that year. Fewer cases of poisoning from most of the principal industrial poisons were reported than in 1937.

The number of cases of lead poisoning, which has been steadily reduced from year to year, showed a still further reduction in 1938. Although in 1900 there were over 1,000 cases, fewer than 100 cases were reported in 1938. The number of cases of lead poisoning in shipbreaking were the same as in 1937, but nearly half of them occurred in one shipyard where a heavily loaded vessel was being broken up and where difficulty had been experienced in getting the workers to wear the respirators which had been provided. Although only 9 cases occurred in the manufacture of white lead, this was the largest number reported in many years. Great improvement has taken place in the pottery industry which now accounts for only a few cases, most of which are in the tile industry. The decrease is mainly due to substitution of a low-solubility glaze for raw lead glaze. Reporting of lead poisoning in the painting of buildings was first required in 1927. In that year 98 cases were reported, 21 of which were fatal; in 1938 there were only 22 cases, with 7 fatalities.

There were reductions in the number of cases of poisoning from moreury, arsenic, and aniline, and a reduction in the number of cases of epithelic patients and ulceration but an increase in cases of chrome ulceration. There were in 1938 the same number of cases of toxic jaundice—4 cases with 1 death—as in the preceding year, and there were no cases of manganese or chronic benzene poisoning. Anthrax cases increased from 23 cases with 4 deaths in 1937 to 34 cases with 5 deaths in 1938. The number of cases of poisoning or disease reported to the department for certain years from 1910 to 1938 is shown in the following table.

Inhalation of fumes and gases was responsible for 190 cases with 27 deaths in 1938, as compared with 196 cases and 20 deaths in the preceding year. The largest number of cases was caused by the

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<sup>&</sup>lt;sup>1</sup> Great Britain. Home Department. Annual Report of the Chief Inspector of Factories for the year 1938. London, 1939. (Cmd. 6081.)

inhalation of carbon monoxide, which accounted for 98 cases with 14 deaths. There were 17 cases of gassing from chlorine, 14 cases with 1 death from nitrous fumes, and 10 cases with 7 deaths from sulphuretted hydrogen. The remaining cases were caused by the inhalation of the fumes or gases from a wide variety of agents.

Cases of Poisoning and of Industrial Disease Among Factory Workers in Great Britain for Specified Years, 1910 to 1938

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Deaths	Disease	1938	1937	1936	1930	1920	1910
Cases       96       141       163       265         Deaths       19       19       13       32         Mercury poisoning:       2       7       3         Deaths       3       8       1       1         Arsenic poisoning:       1       1       1         Cases       3       8       1       1         Manganese poisoning:       1       1       1         Cases       9       10       7       24       1         Deaths       1<	oning:						
Deaths		96	141	163	265	289	506
Cases       2       7       3         Deaths       3       8       1       1         Cases       3       8       1       1         Manganese poisoning: Cases       1       1       1         Aniline poisoning: Cases       9       10       7       24       1         Cases       9       10       7       24       1 <t< td=""><td>hs</td><td>19</td><td>19</td><td>13</td><td></td><td>44</td><td>39</td></t<>	hs	19	19	13		44	39
Cases. Deaths       2       7       3         Arsenic poisoning: Cases. 3       8       1       1         Deaths. 1       1       1       1         Manganese poisoning: Cases. 2       9       10       7       24       1         Aniline poisoning: Cases. 9       10       7       24       1 <td< td=""><td>poisoning:</td><td>-</td><td>-</td><td></td><td></td><td>2.2</td><td>- 6</td></td<>	poisoning:	-	-			2.2	- 6
Deaths		2	7		3	5	91
Arsenic poisoning:							1
Cases       3       8       1       1         Deaths       1       1         Aniline poisoning:       24       1         Cases       9       10       7       24         Deaths       1       1       1         Chronic benzene poisoning:       1       1       1         Cases       1       1       1         Toxic jaundice:       4       4       4         Cases       4       4       4         Deaths       1       1       1         Anthrax:       2       34       23       30       43         Deaths       5       4       1       6         Epitheliomatous ulceration:       6       4       1       6         Cases       165       183       142       194	oisoning:		1				
Deaths		3	8	1	1	3	
Manganese poisoning: Cases       1         Aniline poisoning:       9         Cases       9         Deaths       1         Chronic benzene poisoning:       1         Cases       1         Deaths       1         Toxic jaundice:       4         Cases       4         Deaths       1         Anthrax:       1         Cases       34       23         Deaths       5       4         Epitheliomatous ulceration:       6         Cases       165       183         142       194				i		0	
Aniline poisoning:				1		******	
Cases.       9       10       7       24         Deaths       1       1         Chronic benzene poisoning:       1       1         Cases.       1       1         Deaths       1       1         Cases.       4       4         Deaths       1       1         Anthrax:       34       23       30       43         Deaths       5       4       1       6         Epitheliomatous ulceration:       6       4       1       6         Cases.       165       183       142       194	olsoning:		1		*******		
Deaths		9	10	7	24		
Chronic benzene poisoning:       1       1         Cases.       1       1         Deaths       1       1         Cases.       4       4         Deaths       1       1         Anthrax:       23       30       43         Deaths       5       4       1       6         Epitheliomatous ulceration:       6       1       1       1       6         Cases       165       183       142       194	-		10	1			
Cases.       1       1         Deaths       1         Coxic jaundice:       4       4         Cases.       4       1         Inthrax:       34       23       30       43         Deaths       5       4       1       6         Epitheliomatous ulceration:       6       1       1       1       1         Cases.       165       183       142       194				1		******	*****
Deaths			1	1			
Toxic jaundice:       4       4         Cases.       4       4         Deaths       1       1         Anthrax:       34       23       30       43         Deaths       5       4       1       6         Epitheliomatous ulceration:       6       165       183       142       194			1	î	*******		
Cases.       4       4       4       4       4       4       4       1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Deaths		4	4			6	
Anthrax:	he	1	1	******		0	*****
Cases	***********************			******		*******	
Deaths 5 4 1 6 Epitheliomatous ulceration: 165 183 142 194		34	23	30	43	48	
Epitheliomatous ulceration: Cases	-			1		11	
Cases	matous ulceration.	0	- 4	1	0	11	
		165	193	149	104	45	
Deaths			31	27	36	10	
Chrome ulceration: Cases 115 101 84 95						126	*****

Deaths from silicosis and asbestosis have been investigated by the Department since 1929. There were 430 deaths from silicosis, with or without tuberculosis, in 1938, 416 in 1937, 365 in 1936, and 392 in 1935. These totals include 48 cases occurring in the 4 years in South African gold mines. In 1938, 177 deaths occurred among coal miners and 49 among metal miners (12 in South Africa). Fifty-eight deaths occurred among sandstone masons and 27 in sandstone quarrying and dressing, 48 in the manufacture of pottery, and 25 in metal grinding. The remaining 46 cases occurred in a miscellaneous group of industries. There were 9 deaths from asbestosis and 503 deaths from fibrosis of the lungs which were not all investigated but in which the occupation of the deceased did not appear to have involved a risk from silica or asbestos.

Reporting of cases of dermatitis is not required, but the number of cases voluntarily reported continues to increase, 2,195 being reported in 1938 as compared with 1,985 in 1937. The list of causative agents, the report states, appears to be unlimited, and new items have to be added to the list each year. The largest number of cases was found among chemical workers, textile workers, dyers and calico printers, metal platers and polishers, metal workers, painters and workers in paint manufacture, and bakers and confectioners.

### Labor Organizations

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## TRADE-UNION MEMBERSHIP IN GREAT BRITAIN AND NORTHERN IRELAND IN 1938

TRADE-UNION membership in Great Britain and Northern Ireland increased 3.6 percent between the close of 1937 and the close of 1938, as compared with 10.3 percent in the preceding 1-year period. At the end of 1938 the number of unions was 1,021, the membership totaled approximately 6,054,000, and about half of the members belonged to 12 unions having 100,000 or more members each. The accompanying table shows the number of unions in 1938, the membership by industry groups for 1937 and 1938, and the percent of change in membership.

Trade-Union Statistics for Great Britain and Northern Ireland, 1937 and 1938

Industry group 1	Number of unions	Membership	Percent of change in	
	at end of 1938	1938	1937	member- ship
All industries 2	1,021	6, 053, 624	5, 843, 047	+3.6
Agriculture, horticulture, etc.3	1	46, 943	40, 767	+15.1
Coal mining	90	704, 056	703, 581	+.1
Pottery and glass	13	32, 818	34, 354	-4.5
Iron and steel, tin-plate, tube, and wire manufacture Engineering, iron founding, shipbuilding, other	8	109, 310	111, 628	-2.1
metalworking, and vehicle building Textiles:	80	743, 156	687, 740	+8.1
Cotton		256, 763	267, 712	-4.1
Flax and jute	19	19, 276	20,622	-6.5
HosieryOther textiles (including wool; and bleaching, dyeing,	6	22, 249	16, 504	+34.8
finishing, etc.)	77	126, 193	130, 641	-3.4
Boot and shoe	6	98, 126	97,068	+1.1
Tailoring and other clothing		104, 653	97, 275	+7.6
Furniture		33, 642	32, 582	+3.3
Other	20	32, 444	32, 286	+.5
Paper, printing, etcBuilding, public-works contracting, etc.:		219, 207	214, 119	+2.4
Bricklayers and masons	4	73, 602	69, 651	+5.7
Carpenters and joiners	1	137, 853	129, 214	+6.7
Painters and decorators	5	56, 290	52, 423	+7.4
Builders' laborers 3	4	12, 267	11,584	+5.9
Other	17	62,018	58, 103	+6.7
Transport and general labor:				
Railway service	7	487, 079	483, 250	+.8
Water transport	11	75, 168	73, 610	+2.1
Other transport (road, dock, etc.) and general labor	19	1, 192, 298	1, 143, 450	+4.3

See footnotes at end of table.

<sup>1</sup> Great Britain. Ministry of Labor Gazette, London, September 1939 (pp. 332, 333, 351).

### Trade-Union Statistics for Great Britain and Northern Ireland, 1937 and 1938—Con.

Industry group <sup>1</sup>	Number of unions at end of 1938	Membership	Percent o	
		1938	1937	change in member- ship
Commerce, distribution, and finance:  Commerce and distribution 5.  Banking and insurance.  National Government Local government 6.  Teaching.  Entertainments and sport.  All other.	246 33 25	279, 209 95, 856 400, 932 222, 056 250, 359 34, 626 125, 175	263, 426 93, 304 379, 362 202, 270 248, 090 30, 353 118, 078	+6 +2 +5 +1 +1

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¹ The figures for the individual groups are exclusive of the membership of certain large unions, the membership of which is spread over a variety of industries; the whole membership of these unions is included under "Other transport and general labor" or "Commerce and distribution."

¹ The total membership shown for all trade-unions includes the membership of branches in Eire and overseas (numbering about 72,000 in 1938, of whom 38,000 were engineers and other metalworkers, and 9,000 were railway servants), but wholly excludes the membership of unions whose headquarters are situated outside Great Britain and Northern Ireland. The totals include a number of persons who are members of more than 1 union, and are therefore counted more than once in the figures. The duplication is almost entirely in the "National Government," the "Local government," and the "Teaching" groups. While precise figures are not ascertainable, it is estimated that the duplication in the total figures amounts to about 25,000.

about 20,000.

The figures for this group are exclusive of considerable numbers of workpeople who are classified under "Other transport and general labor." (See note 1.)

Excluding carpenters and joiners, who are classified under "Building."

Including an important union (with a membership of over 180,000 in 1938), which, in addition to a large repr sentation in the distributive trades, has members in many other industries, including soap, paint and varnish, fine chemical, seed crushing, clothing, food, tobacco, transport, etc.

A considerable proportion of the organized manual workers in both the trading and nontrading services of local authorities are classified under "Other transport and general labor."

## Labor Conferences

### MEETING OF STATE LABOR OFFICIALS, 1939

THE annual meeting of the International Association of Governmental Labor Officials was held at Tulsa, Okla., September 7-9, 1939.

In his presidential address, Martin P. Durkin, Director of the Illinois Department of Labor, pointed to the enactment of antilabor legislation in a number of States, and the growing tendency to weaken already existing labor standards.

The keynote of the committee reports was in similar vein. Many of them emphasized the need to defend against encroachments or lowering of existing standards so as to maintain the gains made during recent years. The reports covered minimum wages, apprentice training, women in industry, child labor (dealing with the activities of United States Children's Bureau under the provisions of the Fair Labor Standards Act), wage-claim collections, home work, civil service, and small-loans agencies.

It was pointed out that the loan-shark problem was worse west of the Alleghenies than in the East, largely because the East had realized the importance of controlling the evil and had passed regulatory legislation. The 3 percent per month permitted in most of the eastern States, high though that rate appeared to be, was reported to be very much lower than the rates imposed and collected by loan sharks in western States, which sometimes ran up to 1,300 percent per year. Indicative of the size of the problem is the fact that in 1937 the total volume of small loans was estimated at about 450 million dollars.

Marshall E. Dimock, Assistant Secretary of the United States Department of Labor, discussed the accomplishments and future of that Department. Stressing the fact that the United States Department of Labor had been the seedbed for many of the country's major programs, such as the CCC, the Social Security Law, the various labor boards, the NRA, and part of the Public Works Program, Mr. Dimock went on to point out that the Department, one of the smallest in the Federal Government, was severely handicapped by a shortage of funds. On the theory that the Federal Department of Labor should be on the same level as the best State labor departments, he visualized future expanded services to States and to the country at large if to the

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Percent of change in membership

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to a large oap, paint present activities of the Department were added workmen's compensation, industrial-hygiene enforcement work, an augmented industrial relations service, training and educational programs for workers, a national employment service, social insurance, labor boards, railway labor agencies, and a larger, well-trained general staff and an adequate field organization.

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Other addresses dealt with the work of labor-relations boards, housing, the administration of unemployment compensation, enforcement problems under the Fair Labor Standards Act, the work of the International Labor Office, the function of State industrial-hygiene units, and accident prevention.

The conference passed the following resolutions:

#### Centralized Administration of Labor Laws

1. Whereas organized labor has largely through its own efforts secured the enactment of the Wagner-Peyser Act and the Social Security Act; and

Whereas these laws and the institutions created under their provisions exist for the purpose of affording some degree of protection to labor against the burden of unemployment; and

Whereas labor properly regards these laws and the protection afforded by them as labor's rights and not as a dole bestowed on the basis of status; and

Whereas labor regards the departments of labor, both State and Federal, as the proper agencies to protect and enforce its rights: Now therefore be it

Resolved, That the administration of the laws recognizing labor's right to employment security be vested solely in those agencies both State and Federal charged with the enforcement and administration of laws to protect laboring men and women; and be it further

Resolved, That where the administration of such laws is the responsibility of other agencies, it should be returned to the departments of labor, whether State or Federal.

#### International Labor Organization

2. Whereas the work carried out by the International Labor Office is non-political; and

Whereas the work has demonstrated its usefulness to the member nations of the International Labor Organization and to labor throughout the world:

Resolved, That the International Association of Governmental Labor Officials hereby places itself on record as warmly urging the continued support of and participation in the work of the International Labor Organization in time of war as in time of peace.

#### Protection of Labor's Rights in an Emergency 1

3. Whereas the International Association of Governmental Labor Officials is strongly opposed to the participation by this country in any foreign war; but

Whereas this association recognizes the possibility of emergency production demands being placed upon labor and industry:

Resolved, That this association go on record as strongly urging that in the event of such emergency:

- (1) Labor be given adequate representation on all war industry and other boards which affect labor's interest.
- (2) Labor standards built up over long periods of years be maintained and safeguarded.

<sup>1</sup> Canadian delegates abstained from voting.

(3) The fundamental rights of collective bargaining, freedom of speech, freedom of assembly, and peaceful persuasion be guaranteed just as in peace time.

4. In view of the appalling situation now facing the world:

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Resolved, That the International Association of Governmental Labor Officials recognizes the possibility of emergency production demands.

Resolved, That this association and its members will seek to recall to the public mind:

(1) That the promotion of the general welfare is a foundation principle of our Government;

(2) That many scientific studies have given repeated evidence that the wellbeing of the workers is a primary condition of efficient production and of wholesome national life;

(3) That previous war experience emphasized the importance of maintaining adequate labor standards.

Resolved, That this association and its members will use every effort at their command to maintain all standards in the labor field that have been built up both by Federal and by State authorities, including those applying to all workers and those applying especially to women.

#### Labor Relations

5. Whereas certain States have adopted anti-labor legislation which masquerades under titles of Employment Peace Acts, and

Whereas such laws seriously infringe upon the civil rights of labor guaranteed in the Constitution of the United States and formulated as substantive law by the courts over the past 50 years; and

Whereas there appears to be a concerted effort now being made by those interests opposed to organized labor to enact similar legislation in other States: Now therefore be it

Resolved, That this association record itself as opposing the adoption of such legislation by any State in which it may be proposed.

#### Child Labor

6. Whereas the report of the Committee on Child Labor has emphasized the desirability of uniformity in State child-labor standards and the effectiveness of Federal-State cooperation in the protection of young workers: Be it

Resolved, That the International Association of Governmental Labor Officials reaffirm its support of:

(a) The amendment of State laws (1) to bring the State child-labor standards for manufacturing and mining industries up to those of the Fair Labor Standards Act; (2) to extend these standards to those types of employment not covered by the Fair Labor Standards Act; (3) to provide for employment certificates for all minors up to 18 years of age and for adequate supervision of the issuance of such certificates by the State department of labor; (4) to regulate effectively the employment of children in street trades and in industrialized agriculture; and (5) to extend State compulsory school-attendance laws to all children under 16 years of age and to children between 16 and 18 years of age unless they are legally employed.

(b) The active cooperation of State labor departments with the Children's Bureau of the United States Department of Labor in the administration of the child-labor provisions of the Fair Labor Standards Act.

(c) An effective Nation-wide minimum standard for all child workers, to be attained through the ratification of the pending Child Labor Amendment by the necessary eight States.

(d) The development of more comprehensive State statistics on industrial injuries and industrial diseases of young workers, with a view to providing sound information as a basis for the determination of occupations hazardous for minors under both State and Federal legislation; and be it further

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Resolved, That in view of the present European conflict and regardless of future development, that every effort be made to maintain existing child-labor standards and to safeguard the rights of children to education, normal develop-

ment, and sane living.

7. Whereas the child-labor provisions of the Federal Fair Labor Standards Act of 1938 provide that the Children's Bureau may reimburse the States for their assistance and in the enforcement of the child-labor provisions; and

Whereas many States are operating on curtailed appropriations which makes it impossible adequately to enforce this added burden without Federal assistance:

Now therefore be it

Resolved, That the Children's Bureau of the United States Department of Labor rush to completion rules and regulations which will enable them to assist the several States financially in the enforcement of the act above mentioned; and be it further

Resolved, That the chairman of this convention appoint three (3) persons to confer with officials of the Children's Bureau and to assist in working out the necessary procedure toward this end.

#### Minimum Wage Laws

8. Whereas this association has frequently gone on record as favoring the extension of the benefits of minimum wage legislation; and

Whereas many of the States, which at present have minimum-wage laws, are finding it difficult to bring under the protection of these laws all of the workers eligible to their benefits, due to lack of funds properly to enforce additional wage orders; and

Whereas due to unhappy world conditions, the cost of living of all workers will

undoubtedly increase during the next 12 months:

Resolved, That the International Association of Governmental Labor Officials and its members will use every effort to secure adequate appropriations for State minimum wage divisions, and where that is immediately impossible, will endeavor to secure such allocation of existing State labor department funds as will enable the minimum wage divisions to expand their work so as properly to meet the present crisis.

#### Safeguarding Machinery

9. Be it resolved, That this association places itself on record as strongly favoring the full and complete safeguarding of machines by their manufacturers in the process of manufacturing and further urges that all deterring conflicts in State and other governmental safety codes, regulations, requirements, or practices be resolved and eliminated; be it

Resolved, That the President appoint a committee of three to further this movement among employers, manufacturers of machines, and governmental

agencies.

#### Extension of Social Security

10. Resolved, That the International Association of Governmental Labor Officials favors the extension to the Territory of Puerto Rico of the provisions of the Social Security Act providing for unemployment compensation and also of the Wagner-Peyser Act relative to the establishment of an employment service.

The officers elected for the following year are: President, Adam Bell, Department of Labor, Victoria, British Columbia; first vice president, Frieda S. Miller, Department of Labor, New York, N. Y.; second vice president, Voyta Wrabetz, Industrial Commission, Madison, Wis.; third vice president, E. I. McKinley, Department of Labor, Little Rock, Ark.; fourth vice president, C. H. Gram, commissioner of labor, Salem, Oreg.; fifth vice president, Morgan R. Mooney, deputy commissioner, Hartford, Conn.; secretary-treasurer, Isador Lubin, Bureau of Labor Statistics, Washington, D. C.

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#### MEETING OF INDUSTRIAL ACCIDENT BOARDS, 1939

THE twenty-sixth annual meeting of the International Association of Industrial Accident Boards and Commissions was held at Milwaukee, Wis., September 25–28, 1939.

The two keynotes discernible throughout most of the discussion were (1) the desirability of accident prevention, and (2) the need for adequate and comprehensive statistics to guide the administrators of workmen's compensation laws. In his opening address, President V. Wrabetz, chairman, Wisconsin Industrial Commission, emphasized that in spite of the great increase in the liberality of the Wisconsin compensation law, insurance costs over a quarter century had risen only 26 percent. This was attributed to effective accident prevention. He also pointed out that the physical restoration of an injured worker and his return to as nearly full earning capacity as possible were of greater value to a worker than any amount of benefits he might receive.

In tracing the developments under workmen's compensation laws to determine whether sight had been lost of the fundamental purposes, V. A. Zimmer, secretary-treasurer of the organization and Director of the Division of Labor Standards, United States Department of Labor, concluded that present laws and administrative procedures often failed to adhere to these fundamentals. For instance, permitting employers to elect whether or not to come under the compensation act often left injured workers or their dependents unprotected in cases of financially irresponsible employers who had elected not to come under the act. Similarly, the speed of providing benefits to injured workers in contested cases was often delayed by unnecessary formal and legalistic procedures, for which courts were partly but not entirely responsible.

In his paper on "What We Expect Under Workmen's Compensation and What We Are Getting," Joseph A. Padway, counsel, American Federation of Labor, outlined the A. F. of L. attitude towards workmen's compensation. He advocated an expansion of coverage to include professional workers as well as industrial workers, and the

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Labor ons of lso of rvice. removal of numerical exemptions. Greater uniformity in State laws was urged, with compensation at 70 percent of the weekly wage and a maximum limit of \$25 per week. Stress was also laid on the need for removal of limitations on medical benefits to injured, and the desirability of providing compensation for disabled workers being rehabilitated in a new occupation.

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Other papers dealt with the trends of minimum and maximum benefit limitations, statistical aids for compensation administrators, hazards of older workers, preemployment examinations for workers, the control of medical fees, the participation of industrial commissions

in the setting of premium rates, and rehabilitation.

The officers elected for the following year are: President, W. H. Nickels, Jr., of the Industrial Commission of Virginia; vice president, C. K. Newcombe, of the Workmen's Compensation Board of Manitoba, Canada; secretary-treasurer, V. A. Zimmer, of the Division of Labor Standards, United States Department of Labor.

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#### ANNUAL CONVENTIONS OF A. F. OF L. AND C. I. O.

### American Federation of Labor

THE keynote of the fifty-ninth convention of the American Federation of Labor, held in Cincinnati on October 3 to 13, was supplied by the report of the executive council of the federation indicating a further large increase in the paid-up membership of the unions affiliated with the federation. The total membership of the American Federation of Labor, as reported to the convention, advanced from 3,623,087 in August 1938, to 4,006,354 in August 1939. This was an increase of 383,267 members in 1 year. Since the suspension of the C. I. 0. unions, the membership of the American Federation of Labor is reported to have increased by over 1,566,000. In August 1939 it was only slightly smaller than the peak of 4,078,740 registered in 1920.

The largest increase (about 40,800) in the paid-up membership was reported by the teamsters' union. The 1939 membership of this union (350,000) was nearly five times as large as its reported membership in 1933. Other international and national unions reporting increases

of 10,000 or more members were:

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Es it	timated increase a membership, 1938 to 1939
Bakery and Confectionery Workers' International Union	10, 900
Retail Clerks' International Protective Association	18, 600
International Brotherhood of Electrical Workers	25, 000
International Union of Operating Engineers	28, 800
Meat Cutters and Butcher Workmen	10, 800
International Alliance of Theatrical Stage Employees	14, 200

The federation received a letter from President Roosevelt, urging peace in the labor movement. Mr. Green's reply, approved by the convention, stated that the committee appointed by the A. F. of L. to negotiate peace with the C. I. O. was ready to resume negotiations whenever a conference should be called by the C. I. O.

The convention reiterated its decision of last year with regard to the National Labor Relations Board. By a large majority the convention voted to oppose the Board and to favor the amendments to the Labor Relations Act sponsored by the A. F. of L. at the last session of Congress.

By resolution the convention requested that labor be given representation on all boards appointed by the Administration to deal with the emergency created by the European crisis. The convention also heard an extensive report on the unemployment situation in the United States. Several important resolutions were adopted, including those favoring a shorter workweek, improvement of the civil-service system, greater representation of labor on State and Federal Government boards, and extension of the benefits of the Social Security Act to agricultural workers.

Among the major problems confronted by the convention was the status of the International Typographical Union. In 1938 the delegates of that union were seated by the convention in spite of the fact that the I. T. U. had not paid the assessment of 1 cent per month imposed on the membership of the A. F. of L. since the Denver convention in 1937. This year, however, because of the continuous refusal by the I. T. U. to pay the assessment, the convention refused to seat its delegates and at the meeting following the close of the convention the Executive Council announced the suspension of that union from the federation.

Another problem before the convention was the dispute between the teamsters and brewery workers on jurisdiction over brewery drivers. In 1933 the convention directed the brewery workers to transfer the brewery drivers to the teamsters' organization. The brewery workers in 1939 obtained an injunction from a Federal court restraining the teamsters' union and the executive council of the American Federation of Labor from interfering with the brewery workers' jurisdiction over brewery drivers. At this year's convention the executive council recommended the suspension of the Brewery Workers' Union unless it complied with the 1933 decision. After prolonged debate, President Green was authorized to appoint a special committee to study the situation and report its findings to the January session of the executive council. If no decision is made by that time, the executive council has been authorized to proceed with the suspension of the Brewery Workers' Union.

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Probably the most dramatic event of the convention was the sudden announcement by secretary-treasurer Frank Morrison that he was not a candidate for reelection for the ensuing year. Mr. Morrison, who is 80 years old, has held office since 1897, first as secretary and then as secretary-treasurer of the federation. The convention voted to elect him as secretary-treasurer emeritus with an annual income of \$6,000. George Meany, president of the New York State Federation of Labor, was elected to succeed Mr. Morrison.

Mr. Morrison's resignation was followed by the resignation of Frank Duffy as first vice president of the federation, also on grounds of age. The convention elected as his successor William Hutcheson, president of the Carpenters and Joiners' Union. The other members of the executive council were reelected to their respective offices.

The 1940 convention of the American Federation of Labor will meet in November in New Orleans, La.

## Congress of Industrial Organizations

"Organizing the unorganized" was the slogan of the C. I. O convention held at San Francisco, October 10–13, just as it was in 1935 when the C. I. O. was first organized. The proceedings of the convention as well as the policy and plans of action for the coming year were largely motivated by this position.

No figures of membership or of the financial status of the C. I. 0. were released this year. This was done upon the advice of counsel because the C. I. O. is defendant in court proceedings against a number of affiliated unions. It was reported, however, that the combined membership of the C. I. O. affiliates was approximately 4,000,000.

As an indication of progress in the organization work of the C. I. O., the report of President John L. Lewis stressed the success of the United Mine Workers of America in establishing the union shop throughout the bituminous-coal and anthracite industries; the expansion of activities and the strengthening of the organization work of the Amalgamated Clothing Workers; and the further extension of collective bargaining in the steel industry by the Steel Workers' Organizing Committee, which now has over 600 contracts covering more than half a million steel workers. Substantial progress in organization work was reported by several other unions.

The C. I. O. convention, like that of the A. F. of L., was concerned with the possible dangers to organized labor because of the war crisis and resolved to demand labor representation on emergency war boards

appointed by the Administration.

Following his letter to the A. F. of L., President Roosevelt sent a similar communication to the C. I. O., requesting it to renew negotiations looking toward peace in the labor movement. President Lewis instructed the secretary of the convention to make an appropriate

reply to this letter. The convention adopted a resolution on labor unity, recommending "that the negotiation committee be continued and authorized to exercise its discretion in any future negotiations." There was no debate from the floor on this question.

The attitude of the C. I. O. toward the National Labor Relations Board was considerably different from that of last year, when it adopted a resolution against amending or in any way interfering with the act or the Board. The report of President Lewis and several delegates to the convention strongly criticised recent decisions of the Board and urged that the C. I. O. unions abstain as much as possible from using its services. The debate made it clear, however, that the convention did not favor amendment of the National Labor Relations Act but was merely calling for adjustments to define the objectives of the act and to modify the policy of the Board with reference to the unit rule in collective bargaining.

The United States Department of Labor was also criticised in a resolution, on the ground that "it has failed to make itself the vigorous champion of the wage earners but has instead assumed the role of adjuster and compromiser in contravention to its original purposes."

Among the important resolutions adopted by the C. I. O. was one in favor of political action through Labor's Non-Partisan League, another against the recent antilabor legislation in certain States, notably Oregon, Michigan, Wisconsin, and Pennsylvania, and by the Congress of the United States (as represented by the W. P. A. Appropriation Act). Technological unemployment, the rise in the cost of living, problems of social security and civil liberty, and discrimination against the Negro workers in the South were the subject matter of some of the other resolutions.

The constitution of the C. I. O. was amended, authorizing the election of six vice presidents instead of two. It was also decided to place the office of secretary-treasurer on a regular annual salary to be paid by the C. I. O. The six vice presidents elected were: Sidney Hillman, Amalgamated Clothing Workers of America; Philip Murray, Steel Workers Organizing Committee; R. G. Thomas, United Automobile Workers; Sherman H. Dalrymple, United Rubber Workers; Reid Robinson, Mine, Mill, and Smelter Workers' International Union; Emil Rieve, Textile Workers' Union of America. John L. Lewis, of the United Mine Workers, and James B. Carey, of the Electrical Radio and Machine Workers of America, were reelected president and secretary-treasurer, respectively, of the C. I. O.

## Common Ground

In spite of the apparently irreconcilable position taken by the two organizations on such problems as the National Labor Relations

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ent a gotia-Lewis priate Board and political action by labor, the attitude and the decisions of the A. F. of L. and C. I. O. on a large number of other important labor problems were very similar. Both organizations regarded the unemployment situation in the United States as labor's number one problem. The committee on the shorter workweek, appointed by the American Federation of Labor, submitted an analysis of unemploy. ment in the United States since the depression. Its report dealt with national income, purchasing power of the workers, and technological unemployment, and recommended that the American Federation of Labor concentrate its energies on obtaining the establishment of a 5-day, 30-hour week, as the only practical solution for the unemploy. ment situation in the United States. Another resolution called for a thorough study of labor productivity and costs of production in industry, in order to determine the facts on technological displacement of labor. The C. I. O. was also greatly concerned with the unemploy. ment situation, particularly technological unemployment, and one of its resolutions called for a thorough study of the problem and for a gradual shortening of the workweek without reduction in the weekly pay, with a view to the ultimate establishment of a national 5-day, 30-hour workweek.

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The two conventions took a uniform position with regard to the recent State antilabor legislation; both called for the extension of labor representation on State and Federal boards and particularly on boards dealing with the question of war; both passed resolutions in favor of improving the civil-service system; and both condemned the system of poll taxes used in the South to disfranchise Negro workers. The C. I. O. appointed a committee of appeals to deal with jurisdictional problems. The A. F. of L. had before it a resolution favoring the appointment of a special tribunal to adjust jurisdictional disputes, although this resolution failed of passage.

It is significant to note that the principal present-day problems confronting American labor and outlined by the C. I. O. were precisely the same problems which also received serious consideration by the

A. F. of L. These were to the effect-

1. That organized labor is emphatically opposed to any involvement of the United States in the European war.

2. That labor demands the right of adequate representation on all governmental boards and agencies set up to cope with the war situation and to mobilize national defense.

3. That the real wages of American workers must not be allowed to suffer from rising living costs, and that every effort must be made to stop profiteering and to adjust wage levels to rising prices.

4. That preoccupation with foreign affairs must not be allowed to detract attention from unemployment and other pressing problems of internal economic

insecurity.

5. That more than usual viligance must be exercised to guard existing labor and social legislation and democratic rights against curtailment under the pretext of emergency considerations.

## Labor Laws and Court Decisions

# PENNSYLVANIA LAW REQUIRING REGISTRATION OF ALIENS

AT THE 1939 session of the Pennsylvania Legislature, a law was enacted (No. 304) which requires the registration of certain aliens with the department of labor and industry. This act is one of the first of its kind in the United States. In 1931, a measure was passed in Michigan which, among other things, required aliens to obtain a certificate of residence. The act was held unconstitutional by a district court of that State shortly after its enactment. Also, in Connecticut and Florida the governor has been authorized under certain circumstances to require the registration of aliens. A bill similar to the Pennsylvania statute was introduced recently in the

New Jersey Legislature, but failed of passage.

The Pennsylvania act provides that during the month of December 1939, and of each year thereafter, aliens 18 years of age or over, residing in the State, must register with the department of labor and industry. The act does not apply, however, to an alien whose son or daughter has served in the service of the United States during any war, or who has filed an application declaring his intention to become an American citizen. In the case of an alien who has made an application, but has failed to become naturalized within 3 years thereafter, the act is applicable. An alien is not required to register who has resided continuously in the United States since December 31, 1908, and has never been convicted of any criminal offense in a court of record. Every alien becoming a resident of Pennsylvania after January 1, 1940, must register with the department within 30 days.

The registration must show the name, age, address, occupation, name of employer, characteristics of appearance, name of the wife or husband, if any, names of all children under 18 residing with the alien, and such other information and details as the department of labor and industry may direct. For each registration, the person registered must pay a fee of \$1, and will receive an alien identification card, which must be carried at all times and exhibited upon demand by

any police officer or agent of the department.

Again, no alien, unless he is exempted under the provisions of the act, may be given a license to operate a motor vehicle or have a motor vehicle registered in his name, unless he first exhibits an alien identifi-

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cation card for the current registration period. The department of labor and industry is required to classify registrations and furnish copies to the Pennsylvania motor police. All records must be retained for a period of 3 years. The department is empowered to make and enforce rules and regulations to carry into effect and enforce the provisions of the act.

For failure to register or to carry the identification card, the act provides a penalty. Anyone who comes within the purview of the law and who fails to register within any of the periods required shall, upon conviction, pay a fine of not more than \$100 or be subject to imprisonment for not more than 60 days, or both. An alien who is required to be registered and fails to carry his alien identification card, or fails or refuses to exhibit the card when required to do so, shall, upon conviction, be sentenced to pay a fine of not more than \$10 or be imprisoned for not more than 10 days, or both.

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#### COURT DECISIONS OF INTEREST TO LABOR

## Wages and Hours Act Held Constitutional by District Court

IN A CASE involving the applicability of the Fair Labor Standards Act to sugar producers, the United States District Court of Puerto Rico held that the wage and hour provisions of the act are constitutional. The court declared that these provisions are valid, as they are not beyond the power of Congress under the commerce clause of the Constitution. In connection with sugar producers, it was pointed out that the act does not "regulate the intrastate activity of the preparation of sugar cane for the market," since the producers produce raw sugar for interstate commerce.

The court was also of the opinion that the wage and hour provisions of the act, as applied to sugar producers, do not violate the due-process clause of the Fifth Amendment to the United States Constitution. It was contended that the operations of the sugar producers under the wage and hour provisions of the act would result in a net loss, but the court, in response to this contention, declared that such loss would not be sufficient to establish a lack of due process. It was observed in this connection that the price of sugar fluctuates, and that "the price of sugar, more than the provisions of this act, would account for operating losses or profits." (Bowie v. Claiborne.)

### Steel Wage Determination Held Invalid by Court of Appeals

A wage determination by the Secretary of Labor under the Public Contracts Act (Walsh-Healey Law) has been held invalid by the United States Court of Appeals for the District of Columbia. This law requires that certain labor standards be maintained on Government

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work. It provides for the payment of not less than the prevailing minimum wage as determined by the Secretary of Labor for similar work in the "locality" where the work is to be carried on.

An order had been issued applicable to the iron and steel industry, effective as of March 1, 1939, establishing a wage rate in six localities of the United States. One such locality comprised 14 States and the District of Columbia, extending from Maine to Ohio and Kentucky. The Secretary of Labor fixed a minimum wage of 62% cents an hour in this "locality." Several companies with plants in this area attacked the order. They were denied relief in the lower court, but the Court of Appeals for the District of Columbia reversed this decision and held that an injunction should have been granted. The opinion recently rendered by a 3-judge court, although divided, upheld the contention of the complaining companies. The court said that the order was not only unwarranted but "incongruous," and that such an order was calculated to defeat rather than to accomplish the purposes of the act. The decision was based on the ground that the word "locality" as used in the act did not mean large geographical areas with widely diverse interests. It was pointed out that the word "locality" in ordinary usage was similar to "place, vicinity, neighborhood, and community," and that it was a word of limited meaning.

It was contended by the Secretary of Labor that the determination was valid because the word "locality" was of somewhat indefinite meaning, and its interpretation involved the exercise of discretion by the Secretary, not subject to the control of the courts. In answer to this argument, the court said: "It is true that within the proper limits of the meaning of 'locality,' the Secretary is required by the statute to exercise judgment and discretion; but the determination in this case goes so far beyond any proper application of the word as to defeat its meaning and to constitute an attempt arbitrarily to disregard the statutory mandate."

In the dissenting opinion it was thought that the suit should have been dismissed on the ground that it was in substance one against the United States, and therefore not maintainable without the consent of the Government. The dissenting opinion also pointed out that statutes in regard to the making of Government contracts were intended for the benefit of the Government, and not the contractors or bidders, and therefore a bidder could not complain of the failure of a public officer to comply with the statutes relative to the making of contracts. (Lukens Steel Co. v. Perkins.)

## Incorporation of Labor Unions

A newly organized labor union had the right to incorporate in New York, according to a decision of the State Supreme Court for Albany County. This decision was based on the ground that the union was

composed of workers who were not dominated nor influenced by employers and that the certificate of incorporation on its face disclosed

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no purpose in conflict with the public policy of the State.

In holding that the State board of standards and appeals should have approved the certificate of incorporation, the court ruled that the board had no right to withhold approval on the ground that other labor unions opposed incorporation as "harmful to existing labor units." After pointing out that "labor organizations may be freely organized in this State and freely incorporated if their purpose is not in conflict with the public policy as expressed by the legislature," the court declared that "existing labor organizations have no such vested interest in the field as by opposition to exclude the organization of new units free from the interference or domination of employers." (Purdy v. Picard.)

## Suits Against Unincorporated Labor Unions

An unincorporated labor union was recently held to be subject to suit for wrongful death alleged to have been caused by an employee of the union. The Maryland Superior Court of Baltimore City ruled that such an action could be brought either against the individual members of the union or against the union as an entity, under a State statute which provides that every unincorporated association having a recognized group name may sue or be sued. It was also held that the members of an unincorporated trade-union or other association are liable for the wrongful acts of an agent performed within the scope of his authority, and this even as to members having no knowledge of such acts nor directing or approving them.

The court declared that this right of action existed at common law against the individual members, but that a judgment could be satisfied only out of the common property and not out of the other property of the members. The Maryland statute "did not destroy such common-law right of action," it was said, but "the injured person has the option to sue either the members of the association, or the association itself." In this connection, the court observed that "the statute was enacted because the procedure under the common-law rule of proceeding against the members and collecting the judgment out of the common property had proved cumbersome and troublesome." (State of Mary-

land v. Amalgamated Clothing Workers of America.)

## Secondary Boycott Held Disorderly Conduct

The New York Court of Appeals held in a recent decision that picketing which constituted a "secondary boycott" was unlawful, and that the pickets were guilty of disorderly conduct. In this case store owners had electric signs erected by members of one union. Members

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of another union picketed the store, carrying signs which stated that the maintenance of the electric signs on the premises was unfair to their union. The court declared that "there was no more right to picket their store than to picket the home or store of any other person who happened to buy nonunion material or goods from a rival union," and that these acts constituted disorderly conduct, in spite of the fact that a lower court had held the picketing to be peaceful and free from disorder. (People v. Bellows, 22 N. E. (2d) 238.)

## Injunction in Absence of Employer-Employee Dispute

The Anti-Injunction Act of Washington has been held by the State supreme court not to bar the issuance of an injunction against a labor union engaged in picketing for the purpose of coercing an employer to compel the employees to join the union. In this case a husband and wife owned and operated a small business establishment with the aid of two employees, who were not members of the union. The owners had previously contracted with the union, but as a result of a dispute under the contract, the union had picketed their place of business. Such picketing, however, had been discontinued and the contract had expired prior to the commencement of the picketing involved in this case.

In its decision, the court observed that there was no dispute between the proprietors of the business and the employees, and therefore no labor dispute existed. It was not clear from the record, the court said, whether the purpose of the picketing was to coerce the husband and wife to compel their two employees to join the union, or whether its purpose was to punish them for failing to live up to the terms of the contract while it was in effect. "In either event," the court declared, "the picketing was not lawful." This conclusion was predicated on a prior decision holding that in the absence of a controversy between an employer and his employees, a third party could not picket the business for the purpose of coercing the employer to induce or persuade the employees to become members of the union. (Fornili v. Auto Mechanics' Union, 93 Pac. (2d) 422.)

## Constitutionality of Virginia Insurance Law

The United States District Court for the Eastern District of Virginia recently held constitutional the statute of that State requiring that insurance contracts, with certain exceptions, be made through registered resident agents, who shall not pay more than one-half of the commission to licensed nonresident brokers. This decision is of importance in connection with the workmen's compensation act, as in many cases large concerns will have to pay an increased cost for workmen's compensation insurance.

In upholding the validity of this statute, the court pointed out that prior to the enactment of this law, Virginia casualty and surety companies not doing business on a national scale could not compete with large foreign corporations, since the small domestic companies were unable to offer reduced premiums on interstate contracts with Virginia coverage included. Virginia merchants, industrialists, and business men were discriminated against, it was said, as they were required to pay more for their Virginia insurance than their large competitors "who buy hotchpotch policies outside the State." For these reasons, the court concluded that "the requirements imposed by the act of 1938 upon the plaintiffs with regard to contracts of insurance made outside of Virginia are not beyond the jurisdiction of the State," and that "the provisions of the act are not arbitrary and unreasonable or in violation of the Federal Constitution." (Osborne v. Ozlin, 29 Fed. Supp. 71.)

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## Workmen's Compensation Act Not Applicable to Pilots

The Workmen's Compensation Act of Washington was held by the supreme court of that State not to be applicable to airplane pilots, copilots, stewardesses, and other employees of an air-transport company engaged in actual flying. The court declared that the extrahazardous employments listed in the act do not include such occupations.

In support of this ruling, the court discussed the history of the statute, and pointed out that when it was originally enacted in 1911 it was not applicable to airplane pilots and other persons engaged in flying, since transport by air at that time had not reached the commercial stage. In 1923, however, the act was amended to include airplane pilots and instructors. In 1937 the act was again amended. and this classification was omitted, but the classifications of airplane manufacturing, and teaming, truck driving, and motor delivery were added. It was the opinion of the court that this omission of the classification of airplane pilots and instructors required a holding that such employees were no longer covered by the act, and that neither the classification of airplane manufacturing nor the classification of "motor delivery" included employees engaged solely in flying. In an Oklahoma case compensation was granted to a pilot, but the court observed, in this connection, that the employee in that case was both a mechanic and an instructor in flying, whereas the instant case involved employees whose duties were exclusively confined to flight operations. (State ex rel. Northwest Airlines, Inc. v. Hoover, 93 Pac. (2d) 346.)

## Industrial Disputes

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#### TREND OF STRIKES

PRELIMINARY estimates indicate a substantial drop in strike activity in September 1939 as compared with August. There were about 175 new strikes in September and around 235 in August—a reduction of 26 percent. The number of workers involved in September strikes was smaller than in any preceding month of the year, about 45 percent fewer than in August. The reduction in man-days idle (17 percent) was less, due to the fact that several fairly large strikes which began in August continued into September.

Trend of Strikes, 1933 to September 1939 1

*		Nui	nber of str	ikes			nvolved in ikes	
Year and month	Continued from preceding month	Begin- ning in month or year	In prog- ress during month	Ended in month		Beginning in month or year	In progress during month	Man-days idle dur- ing month or year
1933		1, 695 1, 856 2, 014 2, 172 4, 740 2, 772				1, 168, 272 1, 466, 695 1, 117, 213 788, 648 1, 860, 621 688, 376		16, 872, 128 19, 591, 949 15, 456, 337 13, 901, 956 28, 424, 857 9, 148, 273
January February March April May June July August September October November December	120 129 147 175 195 205 179 172 162 150 165 133	168 198 274 281 300 219 208 262 222 256 207 177	288 327 421 456 495 424 387 434 384 406 372 310	159 180 246 261 290 245 215 272 234 241 239 190	129 147 175 195 205 179 172 162 150 165 133 120	35, 329 53, 175 56, 759 78, 666 83, 029 52, 801 50, 193 48, 378 96, 399 52, 703 43, 128 37, 816	55, 850 77, 486 105, 962 110, 950 124, 682 95, 854 85, 672 81, 052 133, 357 113, 074 75, 445 62, 160	473, 289 514, 111 767, 856 838, 158 1, 174, 052 871, 002 776, 237 830, 987 989, 916 842, 202 557, 903 512, 560
January February March April May June July August 1 September 1	120 126 122 138 148 138 116 136 155	178 179 196 226 221 203 188 235 175	298 305 318 364 369 341 304 371 300	172 183 180 216 231 225 168 216 200	126 122 138 148 138 116 136 155 130	49, 963 66, 853 41, 824 391, 129 92, 603 57, 633 170, 186 65, 000 36, 000	71, 231 86, 168 62, 336 419, 495 452, 564 122, 340 204, 757 95, 000 90, 000	513, 150 536, 010 600, 527 4, 876, 744 3, 515, 731 936, 335 1, 137, 025 900, 000 750, 000

<sup>&</sup>lt;sup>1</sup> Strikes involving fewer than 6 workers or lasting less than 1 day are not included in this table nor in the following tables. Notices or leads regarding strikes are obtained by the Bureau from more than 650 daily papers, labor papers, and trade journals, as well as from all Government labor boards. Letters are written to representatives of parties in the disputes asking for detailed and authentic information. Since answers to some of these letters have not yet been received, the figures given for the late months are not final. This is particularly true with regard to figures for the last 2 months, and these should be considered as preliminary estimates.

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As compared with September a year ago, the figures for September 1939 indicate reductions of 21 percent in number of strikes, 63 percent in number of workers involved, and 24 percent in man-days of idleness.

Figures given for August and September in the preceding table are preliminary estimates based on newspaper reports and other information available as this goes to press. An analysis of strikes in each of these months, based on detailed and verified information, will appear in subsequent issues of the Monthly Labor Review.

#### \*\*\*\*\*

#### STRIKES IN JULY 1939 1

DETAILED information has been obtained concerning 187 strikes which began in July in private industry, involving about 47,000 workers. In addition to these disturbances, there were about 123,000 workers involved in stoppages on WPA projects. These stoppages are counted in this report as one unit, making a total of 188 strikes beginning in July, involving 170,000 workers. These strikes, plus 116 which continued into July from preceding months, made a total of 304 strikes in progress during the month. Approximately 205,000 workers were involved in these strikes and they were idle for a total of about 1,137,000 man-days during July.

WPA stoppages.—The widespread stoppages on WPA projects were in protest against the abandonment of the prevailing wage policy in the new relief appropriation bill passed by Congress for the fiscal year 1939–40. The building trades unions were especially opposed, as they felt that abandonment of the prevailing-wage principle would affect union wage scales on private construction as well as on WPA projects. In many of the cities the protest stoppages of work on WPA projects were led by the local building trades councils.

Immediately after the stoppages occurred, the Work Projects Administration announced that it would enforce its regulation that all workers who absented themselves from work for 5 days would be dropped from the WPA rolls. The result was that many workers were out only a short time, returning to work within the 5-day limit. Thousands of others remained away more than 5 days and were dropped from the rolls. As workers returned in some places, new protest stoppages developed in others so that the demonstrations continued until after the middle of July.

Some violence developed in connection with the protests in Minneapolis, and all WPA projects in the city were closed indefinitely July 14. With the protests at an end in most of the other cities, work was resumed July 21 on Minneapolis projects with the under-

Detailed information on a few strikes has not yet been received. (See footnote to preceding table.)

Data on missing strikes will be included in the annual report.

standing that all workers previously employed, even though they had been away from their jobs 5 days or more, would be assigned to work as quickly as possible, provided that they had not engaged in any violence or illegal activities in connection with the demonstration, and would individually sign affidavits to that effect.

The number of WPA workers who were idle for 1 or more days in connection with these stoppages was about 123,000. Many more than this were idle for a part of a day due to various mass meetings and short demonstrations which were held in protest against the new WPA regulations.

Excluding the WPA stoppages, there were more strikes (30) in July on building and construction projects than in any other industry group. There were 25 in the textile industries. 17 each in the lumber and allied products group, the food industries, and transportation, and 13 in retail and wholesale trade.

Aside from the WPA stoppages, the greatest number of workers involved in the July strikes were in the textile industries (15,700), automobile manufacturing (9,300), and building and construction (5,400); the most man days of idleness because of strikes were in automobile manufacturing (171,000), textiles (110,000), and mining (82,000). The strike of C. I. O. tool and die makers in several plants of the General Motors Corporation accounted principally for the high figures in automobile manufacturing. This strike began July 5 and was settled by agreement August 3.

TABLE 1.—Strikes in July 1939, by Industry

Industry		nning in uly		rogress ng July	Man- days idle
Hiddsiry	Num- ber	Workers involved		Workers	during July
All industries	188	170, 186	304	204, 757	1137, 025
Iron and steel and their products, not including machinery  Blast furnaces, steel works, and rolling mills	1	904 240	9	1, 795 240	11, 847 1, 200
Cast-iron pipe and fittings Stoves Structural and ornamental metal work	1	255 16	1 1	255 16 28	765 48 700
Tin cans and other tinware	1	353	2 1 2	492 9 755	3, 444 45 5, 645
Machinery, not including transportation equipment.  Electrical machinery, apparatus, and supplies	5	493 106	16	2,837	30, 444 12, 281
Foundry and machine-shop products	2	255 132	7 4	832 1,086	9, 400 8, 763
Transportation equipmentAircraft		9, 319	6	11,050 765	183, 223 12, 000
Automobiles, bodies and parts	4	9, 319	5	10, 285	171, 223
Nonferrous metals and their products.  Brass, bronze, and copper products.		1, 183	8	2, 336 554	34, 693 11, 080
Loweless and watches and time-recording devices			1	400 18	6, 096 360
Lighting equipment Smelting and refining—copper, lead, and zinc Stamped and enameled ware.				83 1, 160 21	1, 522 13, 920 315
Other			1	100	1, 400

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## Monthly Labor Review—November 1939

#### Table 1.—Strikes in July 1939, by Industry—Continued

		ning in		rogress ng July	Man-
. Industry	Num- ber	Workers		Workers	days idle during July
umber and allied products	17	2, 155	25	4, 439	62, 234
Furniture	4 5 5 3	633 284 697 541	6 7 7 5	676 884 2, 042 837	6, 985 13, 950 33, 247 8, 052
Stone, clay, and glass products Brick, tile, and terra cotta Marble, granite, slate, and other products Other	5 3 1 1	462 330 65 67	6 3 1 2	596 330 - 65 201	7, 328 2, 390 715 4, 221
extiles and their products	25	15, 761	42	19, 190	110, 126
Fabrics: Cotton goods Cotton small wares Silk and rayon goods Woolen and worsted goods Other	3	2, 873 21 2, 059 1, 366 426	9 1 6 3 4	5, 039 21 2, 186 1, 366 434	44, 665 105 10, 645 3, 542 4, 530
Wearing apparel: Clothing, men's Clothing, women's Men's furnishings Hats, caps, and millinery Shirts and collars Hosiery Other	2 2 1 1 1	6, 102 1, 035 950 25 762 142	6 5 3 1 1 2 1	6, 342 1, 092 956 25 762 367 600	20, 280 3, 410 8, 818 73 5, 334 2, 722 6, 000
Boots and shoes	3	804 793	8 4 1 1	897 824 62 11	7,510 6,56 90 2
Food and kindred products  Baking  Beverages  Butter  Canning and preserving  Confectionery  Flour and grain mills  Slaughtering and meat packing  Other	1 1 1 1 3	1, 812 251 8 31 190 32 1, 213 87	23 8 2 1 1 2 1 2 4 3	251 82 31 132 190 129 1, 238	15, 23 2, 09 1, 61 3 2, 40 3, 80 64 3, 16
Paper and printing		165 48	5 1 1	679	18, 8: 16, 9
Printing and publishing Newspapers and periodicalsOther	2	39	2		7 5
Chemicals and allied products Chemicals Fertilizers Paints and varnishes Petroleum refining Rayon and allied products Soap Other	3 1 1 1	253 45 15	1 1 1 2 2 1	1, 811 45 15 44 1, 030 206 193	9, 6 5, 1 3, 2
Rubber productsOther rubber goods					
Miscellaneous manufacturing Furriers and fur factories Other	. 1	60	1 2	178	1,
Coal mining, anthracite Coal mining, bituminous Metalliferous mining	3 2	1, 742 550			12, 57,
Transportation and communication	8 2 4	395 541 128		3 2, 116 7 991 8 541 3 208 4 350	8, 1, 2, 1,

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TABLE 1.-Strikes in July 1939, by Industry-Continued

Mandays idle during

62, 234

7, 328

4, 221
110, 126
44, 665
10, 645
3, 542
4, 530
20, 280
3, 410
8, 818
75
5, 334
2, 722
6, 000

7,516

6, 564 930

15, 234 2, 096 1, 616

2, 400 3, 800 646

3, 168

18, 810 16, 975 576

> 713 546

19,429

90 150 880

9,600

5, 150 3, 281

5, 200

9,051 1,355 7,696

12, 161 14, 157

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Industry		nning in uly	In p	Man- days idle	
industry	Num- ber	Workers	Num- ber	Workers involved	during July
Trade	13 2	1, 017	28 8	4, 049 1, 254	62, 444 20, 434
Retail	11	973	20	2, 795	42, 010
Domestic and personal service	11	1, 524 156	15 5	1, 696 168	31, 437 4, 594
Laundries	3	1, 162	4	1, 308	25, 112
Dyeing, cleaning, and pressing	4	206	6	220	1,731
Professional service	3	278	3	278	3, 406
Recreation and amusement	3	278	3	278	3, 406
Building and construction	30	5, 422	43	6, 418	52, 463
Buildings, exclusive of PWA	15	1, 492	23	2, 048	16, 860
buildings)	15	3, 930	20	4, 370	35, 603
Agriculture	3	500	3	500	3,650
WPA, relief, and resettlement projects	1	123,062	2	123, 178	369, 766
Other nonmanufacturing industries	4	128	8	673	2,858

Of the 188 strikes beginning in July, 33 were in New York, 25 were in Pennsylvania, 13 in Massachusetts, 12 in California, and 10 in Indiana. Of the 170,000 workers involved in July strikes, 135,000 were in the stoppages which extended into two or more States, as shown at the end of table 2. The WPA stoppage, which accounted for most of these workers, extended into 37 States and the District of Columbia, with the largest numbers of workers out in Illinois, Wisconsin, New York, and Minnesota. In this group of interstate disputes also was the strike of automobile workers affecting some of the General Motors Corporation plants in Michigan and Ohio.

In the strikes confined to the individual States, there were 10,900 workers involved in New York, 4,600 in Massachusetts, 4,000 in Pennsylvania, and 1,900 in California. The most man-days idle because of local strikes were in New York (78,200), California (61,500), and Kentucky (57,400). In the last-named State a strike of Harlan County coal miners who had been idle since April continued until July 19.

### Monthly Labor Review-November 1939

TABLE 2.—Strikes in July 1939, by States

	Beginnin	g in July	In progress	furing July	Man-day
State	Number	Workers involved	Number	Workers involved	idle durin July
Il States	188	170, 186	304	204, 757	1, 137,0
Jabama	1	112	2	612	10,2
rizona			1	87	2,0
alifornia	12	1,884	22	4, 914	61,4
olorado	2	585	2	585	7,1
onnecticut	2	261	4	356	5,
elaware	1	10	1	10	0,
istrict of Columbia	1	121	1	121	
orida	2	1, 306	3	1,406	200
eorgia	2	537	4	1, 573	22, 27,
linois	8	869	14	1, 791	21,
diana	10	834	15	2, 568	17,
W8	7	192	8	396	25,
	3	563	5		4
entucky			2	14, 133	57
ouisiana	1	15		150	2
aine	1	12	1	12	
aryland	2	145	2	145	1
[assachusetts	13	4, 645	15	4, 766	12
lichigan	3	475	3	475	2
innesota	4	241	4	241	1
lissouri	3	165	7	1,079	16
ebraska	1	500	1	500	7
ew Hampshire	2	1,200	2	1, 200	2
ew Jersey	9	1, 155	18	2,701	41
ew Mexico	3	294	3	294	4
ew York	33	10, 924	62	12, 487	78
orth Carolina	1	205	2	745	1
hio	6	975	12	2,994	2
klahoma	2	122	3	922	1
regon	4	825	5	915	1
ennsylvania	25	3, 958	35	4, 730	3
		0, 000	3	960	1
buth Carolina		240	2	430	
	1	340	2		
outh Dakota	2	41		41	
ennessee	3	121	5	408	1 3
exas	5	399	7	816	
tah	2	84	2	84	1 1
irginia	2	357	2	357	1 3
Vashington	3	412	12	2, 598	4
Visconsin	1	36	3	603	1
nterstate	6	1 135, 266	7	1 135, 552	55

All

As stated before, the number of workers involved in the WPA stoppages in July was about 123,000. The average number of workers involved in the 187 strikes in private industry was 252. About 56 percent of the July strikes involved fewer than 100 workers each, 39 percent involved from 100 up to 1,000 workers each, and in each of 9 strikes (5 percent) 1,000 or more workers were involved. (See table 3.)

<sup>1</sup> Includes 123,062 workers involved in the WPA stoppages.

Table 3.—Strikes Beginning in July 1939, Classified by Number of Workers Involved

		Number of strikes in which the number of workers involved was—								
Industry group	To- tal	6 and un- der 20	20 and un- der 100	100 and un- der 500	500 and un- der 1,000	1,000 and un- der 5,000	and un- der	10,000 and over		
All industries	188	37	69	62	11	6	2	1		
Iron and steel and their products, not including machinery. Machinery, not including transportation equipment. Transportation equipment. Nonferrous metals and their products. Lumber and allied products. Stone, clay and glass products. Textiles and their products. Leather and its manufactures. Food and kindred products. Paper and printing Chemicals and allied products. Miscellaneous manufacturing.  Nonmanufacturing	5 5 4 2 17 5 25 4 17 4 3 8	1 1 2 5 1 1 1	111883771883155	3 3 2 8 2 9	4 1 1	3	1			
Extraction of minerals Transportation and communication Trade Domestic and personal service Professional s rvice Building and construction Agriculture WPA, relief, and resettlement projects Other nonmanufacturing industries	7 17 13 11 3 30 30 3 1	5 5 5 7	6 5 2 2 11	5 6 2 3 1 9 3	2	1				

Union-organization matters were the major issues involved in 52 percent of the strikes beginning in July, wages and hours were the major issues in 28 percent, and in 20 percent the major issues were jurisdiction, rival union or factional disputes, sympathetic action, and miscellaneous grievances over conditions of work.

Due principally to the WPA stoppage, about 78 percent of the workers involved were concerned with the disputes over wages and hours. Eleven percent of the workers were involved in strikes over union-organization matters, and the same proportion in strikes over miscellaneous issues. Excluding the WPA stoppage, about 20 percent of the remaining workers were involved in the wage-and-hour strikes, 40 percent in the union-organization strikes, and 40 percent in the disputes over miscellaneous issues. (See table 4.)

A total of 168 (55 percent) of the 304 strikes in progress during July were terminated during the month. The average duration of this group of strikes was 22 calendar days. About 39 percent of them were terminated in less than a week after they began, 39 percent lasted from a week up to 1 month, 18 percent had been in progress from 1 to 3 months, and 7 strikes (4 percent) had been in progress for 3 months or more. The largest among this latter group was the strike at the Singer Manufacturing Co. which began April 11 and was ter-

Man-days dle during

1, 137,025

16,000 7,500 2,535

78, 224 11, 620

5, 958 6, 143 35, 394 11, 130

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minated about July 22, with no very definite agreement except that the idle employees were to be reinstated as soon as possible without discrimination. (See table 5.)

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Table 4.—Major Issues Involved in Strikes Beginning in July 1939

	Stril	kes	Workers involved		
Major issue	Number	Percent of total	Number	Percent of total	
All issues	188	100. 0	170, 186	100.	
Wages and hours		27. 7	132, 596	77	
Wage increase	42	22. 4	7, 716	4	
Wage increase hour decrease	5	2.7	1, 121		
Wage increase, hour decrease	3 1	1.6	1 192 009		
Wage decrease, hour increase	* 1	.5	1 123, 062	72	
Union organization	98	52.1	18, 699	4	
Recognition	4.0	8, 5	2, 525	1	
Recognition and wages	13	6.9	7, 322		
Recognition, wages and hours	21	11. 2	856		
Closed or union shop	32	17.0	5, 341		
Discrimination	10	5.3	2, 047		
Other.	6	3. 2	608	1	
Miscellaneous		20. 2	18, 891	1	
Sympathy	6	3. 2	769		
Rival unions or factions		4.3	13, 446		
Jurisdiction 3	4-1	4.8	1,598		
Other	15	7.9	3, 078	1	

¹ This was the widespread WPA stoppage.
² It is probable that the figures here given do not include all jurisdictional strikes, of these disputes, it is difficult for the Bureau to find out about all of them. Due to the local nature

TABLE 5 - Duration of Strikes Ending in July 1030

		N	Vumber	of strike	es with d	uration o	of—
Industry group  All industries	Total	Less than 1 week	1 week and less than ½ month	less than 1	1 and less than 2 months	than 3	months or more
	168	65	35	31	20	10	
Manufacturing  Iron and steel and their products, not including machinery.  Machinery, not including transportation equipment.  Transportaton equipment.  Nonferrous metals and their products.  Lumber and allied products.  Stone, clay, and glass products.  Textiles and their products.  Leather and its manufactures.  Food and kindred products.  Paper and printing.  Chemicals and allied products.  Miscellaneous manufacturing.  Nonmanufacturing	1 3 11 2 20 4 15 2	2 2 1 5 1 9 1 6	3 	1 1 2 2 2 1 3 3 2 4 1	2 3 1 1 1	2	
Extraction of minerals	19 5 2 29 2 2	2 8 2 3 1 12 2		5	2 5 1 2	1 2 1	

Government officials or boards assisted in negotiating settlements of 39 percent of the strikes ending in July and about the same proportion were settled through negotiations directly between employers and representatives of organized workers. About 17 percent of the strikes were terminated without formal settlement. In the case of the WPA stoppage, included in the latter group, part of the workers returned to their projects after a few days of idleness, while others, who remained away 5 or more days, were dropped from the WPA rolls. Most of the other strikes in this group were terminated when the employees returned to work without settlement of the disputed issues or when they lost their jobs through replacement or through removal or liquidation of the employer's business.

Table 6.—Methods of Negotiating Settlements of Strikes Ending in July 1939

	Stri	kes	Workers	involved
Negotiations toward settlements carried on by—	Number	Percent of total	Number	Percent of total
Total	168	100.0	168, 379	100.0
Employers and workers directly Employers and representatives of organized workers directly Government officials or boards Private conciliators or arbitrators Terminated without formal settlement	2 65 66 6 29	1. 2 38. 7 39. 2 3. 6 17. 3	85 15, 996 21, 241 4, 295 1 126, 762	9. 12. 6 2. 6 75.

1 Includes 123,062 workers involved in the WPA stoppage.

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Approximately 36 percent of the strikes ending in July were successful from the workers' point of view, 34 percent resulted in partial gains or compromise settlements, and 20 percent resulted in little or no gains to the workers.

About 76 percent of the workers involved, due principally to the WPA stoppage, obtained little or no gains as a result of their strikes. Excluding the workers involved in the WPA stoppage, about 28 percent of the workers involved substantially won what was demanded, 52 percent obtained partial gains or compromise settlements, and only 10 percent gained little or nothing.

Table 7.—Results of Strikes Ending in July 1939

	Str	ikes .	Workers	involved
Results	Number	Percent of total	Number	Percent of total
Total	168	100. 0	168, 379	100. 0
Substantial gains to workers Partial gains or compromises Little or ne gains to workers Jurisdiction, rival union, or faction settlements Indeterminate	60 57 33 16 2	35. 8 33. 9 19. 6 9. 5 1. 2	12, 480 23, 652 1 127, 659 4, 408 180	7. 4 14. 0 75. 9 2. 6

<sup>&</sup>lt;sup>1</sup> Includes 123,062 workers involved in the WPA stoppage.

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In terms of number of strikes, the disputes over wages and hours were more successful from the viewpoint of the workers than those primarily over union-organization matters. About 41 percent of the wage-and-hour strikes were substantially won, the same number compromised, and 18 percent lost, as compared with 42 percent of the union-organization strikes which were substantially won, 32 percent compromised, and 26 percent lost.

Table 8.—Results of Strikes Ending in July 1939 in Relation to Major Issues Involved

			Strike	es resultin	g in—	
Major issue	Total	Substan- tial gains to workers	Partial gains or compro- mises	Little or no gains to workers	Jurisdiction, rival union, or faction settlements	Indeter- minate
			Number of	fstrikes		
All issues	168	60	57	33	16	
Wages and hours	51	21	21	9		
Wage increase	40	19	15	6	*********	
Wage decrease	3	10	1	2		
Wage increase, hour decrease	6	2	4		*********	
Wage decrease, hour increase.	1			1	*********	
Hour increase.	1		1		*********	
Inion organization	79	33	25	21		
Recognition	5		3	2		
Recognition and wages	15	7	5	3		
Recognition, wages and hours	17	8	5	4		
Closed or union shop	30	13	8	9		
Discrimination	7	2	3	2		
Other	5	3	1	1		
discellaneous	38	6	11	3	16	
Sympathy	4		1	2		
Rival unions or factions	9		******		9	
Jurisdiction	7		*******	*******	7	
Other	18	6	10	1	********	
		N	umber of w	orkers inv	olved	
All issues	168, 379	12, 480	23, 652	127, 659	4, 408	1
Wages and hours	131, 602	2, 349	4, 657	124, 596		-
Wage increase	4, 677	2, 289	1, 643	745		
Wage decrease	852	2, 200	63	789		
Wage increase, hour decrease	2, 611	60	2, 551			
Wage decrease, hour increase 1	123, 062		3,001	123, 062		
	400		400			
Hour increase		8, 704	16, 887	2,774		
Hour increase	28, 365		172	958		
Recognition	1, 130		1 114			
Recognition	1, 130	6, 182	1, 147	444	********	BAYAGE
Inion organization Recognition Recognition and wages Recognition, wages and hours	1, 130 7, 773 593	6, 182 353	1, 147 183	57		
Recognition	1, 130 7, 773 593 16, 883	6, 182 353 1, 802	1, 147 183 13, 950	57 1, 131	1	******
Inion organization Recognition Recognition and wages Recognition, wages and hours Closed or union shop Discrimination	1, 130 7, 773 593 16, 883 1, 312	6, 182 353 1, 802 33	1, 147 183 13, 950 1, 185	57 1, 131 94		******
Inion organization Recognition Recognition and wages Recognition, wages and hours Closed or union shop Discrimination Other	1, 130 7, 773 593 16, 883 1, 312 674	6, 182 353 1, 802 33 334	1, 147 183 13, 950 1, 185 250	1, 131 94 90		******
Inion organization Recognition Recognition and wages Recognition, wages and hours Closed or union shop Discrimination Other Wiscellaneous	1, 130 7, 773 593 16, 883 1, 312 674 8, 412	6, 182 353 1, 802 33	1, 147 183 13, 950 1, 185 250 2, 108	57 1, 131 94 90 289		******
Inion organization Recognition Recognition and wages Recognition, wages and hours Closed or union shop Discrimination Other Sympathy	1, 130 7, 773 593 16, 883 1, 312 674 8, 412 689	6, 182 353 1, 802 33 334	1, 147 183 13, 950 1, 185 250	1, 131 94 90	4, 408	******
Inion organization Recognition Recognition and wages Recognition, wages and hours Closed or union shop Discrimination Other Miscellaneous Sympathy Rival unions or factions	1, 130 7, 773 593 16, 883 1, 312 674 8, 412 689 3, 432	6, 182 353 1, 802 33 334	1, 147 183 13, 950 1, 185 250 2, 108	57 1, 131 94 90 289	4, 408	******
Inion organization Recognition Recognition and wages Recognition, wages and hours Closed or union shop Discrimination Other Sympathy	1, 130 7, 773 593 16, 883 1, 312 674 8, 412 689	6, 182 353 1, 802 33 334	1, 147 183 13, 950 1, 185 250 2, 108	57 1, 131 94 90 289	4, 408	******

<sup>&</sup>lt;sup>1</sup> Workers involved in the WPA stoppage.

The proportion of workers obtaining successful or partially successful settlements of their strikes, however, was larger in the union-organization disputes than in the wage-and-hour strikes. In fact, nearly 95 percent of the workers involved in wage-and-hour disputes,

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cessnionfact, ates, counting the WPA stoppage, gained little or nothing. Excluding the WPA stoppage, 27½ percent of the workers involved in wage-and-hour strikes substantially won their demands, 54½ percent obtained compromise settlements, and 18 percent gained little or nothing. In the union-organization strikes, 31 percent of the workers substantially won their demands, 59 percent obtained compromise settlements, and 10 percent gained little or nothing.

#### \*\*\*\*\*\*\*

### ACTIVITIES OF UNITED STATES CONCILIATION SERVICE, SEPTEMBER 1939

THE United States Conciliation Service, in September disposed of 225 situations involving 86,551 workers. The services of this agency were requested by the employees, employers, and other interested parties.

Of these situations, 139 were strikes, threatened strikes, lock-outs, and controversies, involving 71,581 workers. The remaining situations, involving 14,970 workers were services rendered, such as filling requests for information, adjusting complaints, holding conferences regarding labor conditions, etc.

The facilities of the Service were used in 23 major industrial fields, such as building trades and the manufacture of foods, iron and steel, textiles, etc. (table 1), and were utilized by employees and employers in 40 States and the district of Columbia (table 2).

Table 1.—Situations Disposed of by U. S. Conciliation Service, September 1939, by Industries

Industry	Disp	utes	Other situations		Total	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
All industries	139	71, 581	86	14, 970	225	86, 551
Automobile	7	947			7	947
Building trades	9	842	7	21	16	863
Chemicals	4	763			4	763
Communication	i	26			1	26
Hotels, restaurants, and others (domestic	-				-	
and personal)	10	625			10	625
Food		31, 965	5	8	21	31, 973
Iron and steel.	7	1, 065	4	10	11	1, 07
Leather		600	1	65	2	66
Lumber and furniture	6	1,064	1	1	7	1, 06
Machinery	9	4, 082	1	4	13	4, 08
Maritime	2	185	2	14	4	19
		1, 308	2	3, 501	5	4.80
Nonferrous metals	2	1, 035	-	3, 001	2	1, 03
Paner	5	823			5	82
Paper	3	167		38	3	20
PetroleumPrinting	0	107	1		2	4
			2	41		
ProfessionalRubber		2	2	3,001	4	3,000
	6	2, 220			6	2, 22
Stone, clay, and glass	7	5, 828	2	201	9	6, 02
Textile	15	14, 488	10	284	25	14, 77
Tobacco	1	30	2	151	3	18
Trade	9	2, 524	3	4	12	2, 52
Transportation	13	950	8	557	21	1,50
Unclassified		42	30	7,069	31	7, 11

Table 2.—Situations Disposed of by U. S. Conciliation Service, September 1939, by
States

States	Dist	outes	Other si	tuations	Total	
	Number	Workers involved	Number	Workers involved	Number	Worker
.ll States	139	71, 581	86	14, 970	225	86,5
labama	2	194			2	
rkansas	1	500			1	
rizona	î	6	********		1	
alifornia	10	3, 556	3	17	13	
olorado	1	223	1	32		3,
onnecticut		220			2	
District of Columbia.		F 040	1	2	1	
	10	5, 846	5	3, 054	15	8,
lorida	3	192	1	150	4	1
eorgia	1	600			1	
laho	1	9			1	
linois	13	26, 453	13	4, 945	26	31
ndiana	3	3, 347	3	59	6	31
)W8	2	2, 630		00	2	
ansas	2	2, 000	1	1	1	2
entucky	2	108				1
	2	185	1	1	3	
ouisiana			1	199	1	
laine	2	500			2	
[aryland	4	9, 483	*******		4	1 9
Iassachusetts	4	3, 792	3	69	7	3
lichigan	3	405	3	356	6	1 '
Innesota	3	275			3	
[ississippi		210	2	2	2	
fissouri	4	327	4	4	8	
on Homoshine			1	4	8	
lew Hampshire	1	29	*******		1	
ew Jersey	12	2, 789	2	2	14	
ew Mexico	1	276	1	2	2	1
lew York	12	1,916	8	192	20	1
forth Carolina	1	50	3	3	4	
hio	9	2,656	9	3,715	18	1 1
klahoma	1	550		-,	1	
regon	3	197			3	
ennsylvania	10	2, 300	4	5	14	
hode Island	10	2,000	3	271	3	1
outh Carolina		900	3	211		1
	1	300		******	1	
ennessee	4	708	1	1	5	1
exas	4	245	7	226	11	
tah	3	593	1	150	4	
'irginia	4	114		*********	4	
Vest Virginia	1	25	4	1, 511	5	1
Visconsin	2	310		-, -, -	2	
Vyoming		010	1	1	1	

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## Cost and Standards of Living

# CHANGES IN COST OF LIVING IN THE UNITED STATES, JUNE 15, 1939

THE cost of living for families of wage earners and lower-salaried workers in the 32 large cities of the United States surveyed by the Bureau of Labor Statistics was three-tenths of 1 percent lower on June 15, 1939, than on March 15.

Fuel and light costs showed the largest decrease over the quarter, reflecting the lowered cost of coal usual at that season of the year. Changes in the cost of food, clothing, and rentals contributed slightly to the general decline, while the cost of the housefurnishing goods and the miscellaneous groups remained virtually unchanged.

The Bureau of Labor Statistics' index of the cost of all goods purchased by wage earners and lower-salaried workers, based on costs in 1923-25 as 100, was 81.7 on June 15 as compared with 82.0 on March 15. Living costs were 1.9 percent lower than they were a year earlier and 18.0 percent below their level at the peak point in December 1929. They were 9.8 percent higher than at the low point of June 1933.

Average living costs declined over the quarter in 19 of the 32 cities and increased in 13 of the cities included in this survey. The largest percentage change was reported from Birmingham where living costs decreased 1.0 percent.

Food costs were higher on June 15 than they had been 3 months earlier in 20 of the cities for which indexes of total living costs are regularly prepared, and lower in 12 of these cities. The average drop of 0.2 percent reflected changes ranging from a 2.0 percent decline in New York to a 1.9 percent advance in Pittsburgh and Portland, Maine.

Average clothing costs and rents each declined 0.1 percent over the quarter. In no city was there a change in either of these groups that exceeded one-half of 1 percent.

Fuel and light costs in the 32 cities averaged 3.4 percent below the March 15 level. All cities except 2 reported declines. Portland, Maine, and San Francisco reported that fuel and light costs remained unchanged. In most of the cities in which fuel costs decreased, the seasonal slump in coal prices was the chief cause. In others, however, notably Houston, Seattle, and Portland, Oreg., lowered wood prices represented the primary reason for the declines.

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On the average, the cost of housefurnishing goods and of the miscellaneous group remained unchanged at the March 15, 1939, level Increases reported for 12 cities were offset by decreases for 20 cities. No city reported a change of as much as 2.0 percent in the quarter. For the miscellaneous group, which showed an average change of less than one-half of 1 percent, the number of cities showing increases and In 2 cities there was no the number showing decreases were equal. change in the cost of items in this group.

Percentage changes in the cost of goods purchased by wage earners and lower-salaried clerical workers from March 15, 1939, to June 15, 1939, are shown in table 1 for the 32 large cities of the United States, separately and for these cities combined.

TABLE 1.—Percentage Change from Mar. 15, 1939, to June 15, 1939, in the Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers

City	Allitems	Food	Clothing	Rent	Fuel and light	House- furnish- ing goods	Miscel- laneous
Average: 32 large cities	-0.3	1 -0.2	-0.1	-0.1	-3.4	(3)	(8)
New England: Boston Portland, Maine	-, 2 +, 6	+.1 +1.9	(3) +. 1	1 1	-3. 5 (4)	+0.3	(3) (3)
Middle Atlantic: Buffalo New York Philadelphia Pittsburgh Scranton	5 9 +. 1 +. 5 3	+.8 -2.0 +.6 +1.9 +.5	3 4 2 1 2	3 +. 1 (1) +. 1 5	-2.1 -3.4 -4.2 4 -5.2		-1.5 (3) +.4 (2) (3)
East North Central: Chicago Cincinnati Cleveland. Detroit. Indianapolis	3 2	+1. 1 8 7 -1. 5 +. 9	(2) (2) 5 +. 2 5	5 1 +. 1 2	-7. 2 -1. 1 7 -2. 2 -3. 7	+.1 -1.0 +.6 +.5	(3) +.1 (2) +.2 +.3
West North Central: Kansas City Minneapolis St. Louis	+.1 +.2 6	6 +1. 6 -1. 5	3 (3) 1	1 +.2 1	9 -2. 2 -5. 4	+.6	+1.2 6 +.6
South Atlantic: Atlanta Baltimore Jacksonville Norfolk Richmond Savannah Washington, D. C	+.1 1 5 +.3	+.3 +.4 +.8 +.5 9 +1.5 +.4	1 3	1 (3) 2 (1) (3) (3) (2	-7.5 -5.5 6 -2.6 -2.9 4 -2.9	+.6 2 4 -1.3 +.7	: (4) (2) (3) +. (4) +.
East South Central: Birmingham Memphis Mobile	(3)	-1.0 2 +1.0	(2)	1 4 2	-11. 4 3 -2. 4	(3)	(3)
West South Central: Houston New Orleans	1 2	+: 4 -: 7		†.4 †.4	-5.6 -1.6		(3)
Mountain: Denver	(2)	+1.3	(3)	(3)	-1.6	2	-
Pacific:  Los Angeles Portland, Oreg San Francisco Seattle	+.2	-1.9 +.9 -1.7 +.6	2 2	3 3 +.2	-1.4	3 6	-

<sup>1</sup> Includes 51 cities.
<sup>2</sup> Increase less than 0.05%.
<sup>3</sup> Decrease less than 0.05%.
<sup>4</sup> No change.

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Percentage changes in the cost of goods purchased by wage earners and lower-salaried workers from a peak point in June 1920, from December 1929, from the low point June 1933, and from June 15, 1938, to June 15, 1939, in 32 cities, are presented in table 2.

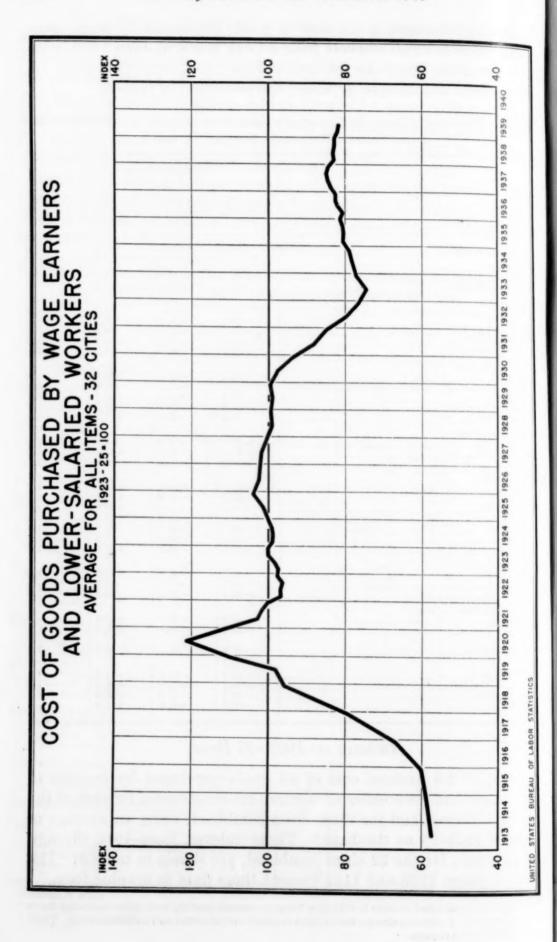
TABLE 2.—Percentage Change in Cost of All Goods Purchased by Wage Earners and Lower-Salaried Workers for Specified Periods

	Percentage change from—						
City	June 1920	Dec. 1929	June 1933	June 15,			
	to June 15,	to June 15,	to June 15,	1938 to June			
	1939	1939	1939	15, 1939			
Average: 32 large cities	-32.6	-18.0	+9.8	-1.9			
New England: Boston Portland, Maine	-33. 2	-19.7	+6.3	-1.9			
	-33. 3	-16.5	+6.6	-1.5			
Middle Atlantic: Buffalo New York Philadelphia Pittsburgh	-30.9	-17.7	+9.3	5			
	-29.8	-18.3	+6.2	-1. 6			
	-31.6	-18.6	+8.5	-2. 2			
	-32.7	-19.2	+10.6	-2. 3			
	-33.9	-20.9	+6.1	-2. 0			
East North Central: Chicago Cincinnati Cleveland Detroit Indianapolis	-33.1	-21.5	+10.6	-2.8			
	-32.7	-19.1	+7.9	-3.2			
	-28.9	-12.3	+14.1	7			
	-37.8	-18.5	+20.2	-3.2			
	-36.3	-17.6	+11.2	-1.6			
West North Central: Kansas City Minneapolis St. Louis	-37.6	-15.5	+8.0	-1.3			
	-31.2	-14.8	+13.0	-1.8			
	-34.0	-19.0	+9.5	-1.9			
South Atlantic: Atlanta Baltimore Jackson ville Norfolk Richmond Savannah Washington, D. C	-39.7 -29.2 -36.6 -36.1 -34.8 -38.1 -29.9	-19.0 -15.0 -18.0 -16.8 -16.7 -18.9	+10.7 +10.0 +10.6 +10.2 +8.6 +7.4 +10.0	-1.7 -1.4 -1.3 9 -1.1 -1.2			
East South Central: Birmingham Memphis Mobile	-40.3	-21.2	+12.7	-2.0			
	-35.1	-17.1	+9.6	-1.8			
	-85.5	-19.1	+9.8	-1.3			
West South Central: Houston New Orleans	-34. 2	-17.5	+13.6	8			
	-28. 0	-15.8	+10.5	+.1			
Mountain: Denver	-34.2	-14.7	+10.7	-2.3			
Pacific: Los Angeles Portland, Oreg San Francisco Seattle		-17. 3 -13. 5 -13. 5 -12. 6	+11.3 +14.0 +10.3 +11.4	-1.1 -1.0 -1.3 8			

#### Indexes on 1923-25 Base

Indexes of the average cost of all goods purchased by families of wage earners and lower-salaried workers are constructed for each of the 32 cities surveyed and for these cities combined, using an average of the years 1923–25 as the base. These indexes, from 1913 through June 15, 1939, for the 32 cities combined, are shown in table 3. The charts on pages 1156 and 1157 present these data in graphic form.

<sup>&</sup>lt;sup>1</sup> Indexes of food costs based on costs in 1923-25 as 100 are computed monthly for 51 cities (including the 32 cities in this report). Percentage changes from month to month are calculated for 7 additional cities. These data will be sent upon request.



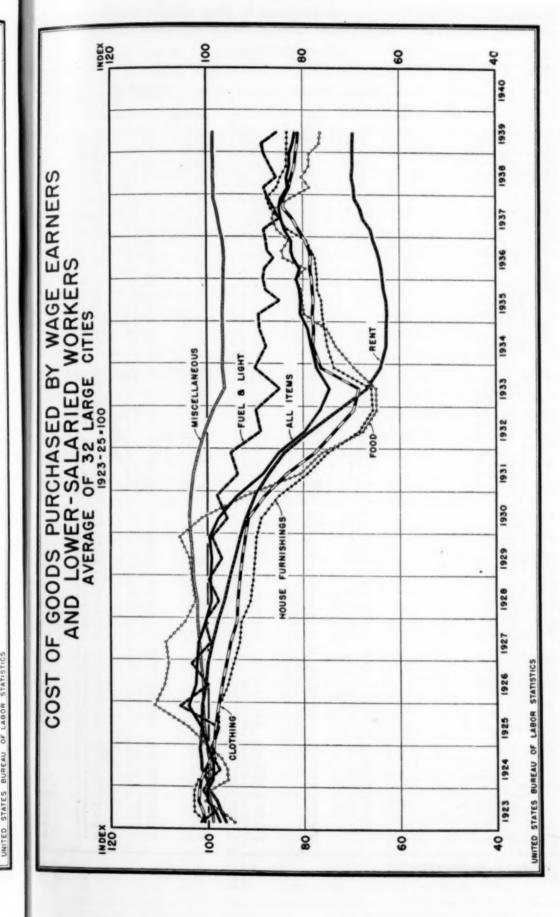


Table 3.—Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in 32 Large Cities Combined, 1913 through June 15, 1939

[Average 1923-25=100]

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Date	All items	Food 1	Clothing	Rent	Fuel and light	House- furnish- ing goods	Miscel. laneous
913—Average 1914—December 1915—December 1916—December 1917—December 1918—December	57. 4 58. 9 60. 1 66. 9 79. 4 95. 8	63. 1 66. 3 66. 3 79. 5 99. 1 118. 2	55. 7 56. 3 58. 3 66. 9 83. 1 118. 9	61. 4 61. 4 62. 3 62. 8 61. 5 64. 7	53. 9 54. 5 54. 5 58. 5 66. 9 78. 7	47. 7 49. 6 52. 8 61. 0 71. 8 97. 8	50.1 51.6 53.9 56.8 70.4 81.9
919—June	98. 2 109. 8 121. 2 112. 2 102. 8 101. 7 100. 3	117. 3 126. 4 146. 1 115. 7 95. 8 102. 1 99. 7	128. 8 159. 5 168. 6 151. 0 129. 8 112. 2 107. 2	67. 3 73. 1 79. 4 87. 5 92. 7 93. 3 94. 8	77. 8 82. 6 91. 3 103. 7 98. 4 98. 2 99. 1	104. 0 123. 0 137. 0 132. 8 114. 3 103. 2 100. 4	84. 3 92. 9 99. 2 103. 2 103. 2 102. 5 102. 0
922—March June September December 923—March June September December	97. 7 97. 6 98. 7	93. 5 95. 6 93. 3 96. 7 94. 6 97. 7 100. 0 99. 5	102. 4 100. 4 99. 3 99. 4 100. 8 101. 1 101. 9 101. 8	94. 6 95. 0 95. 2 95. 8 96. 3 97. 3 98. 2 99. 7	96. 3 95. 9 100. 9 102. 2 101. 5 98. 7 99. 8 101. 1	95. 0 93. 2 93. 4 96. 3 100. 7 102. 8 102. 9 102. 9	100,4 99,5 99,2 98,9 99,0 99,1 99,6
924—March June September December  925—June December	99. 0 98. 9 99. 2 100. 0 101. 4 104. 0	95. 9 95. 9 97. 3 99. 5 104. 2 111. 1	101. 5 100. 6 99. 5 98. 9 98. 5 97. 9	100, 2 101, 3 101, 4 101, 7 101, 4 101, 3	99, 9 97, 6 98, 9 99, 5 97, 9 105, 8	102. 1 99. 4 98. 6 99. 1 97. 9 97. 8	99.7 99.8 99.8 100.2 100.8
926—June	102. 5 102. 3 101. 9 100. 4 99. 2 99. 4	108. 9 108. 1 108. 7 104. 7 102. 5 103. 2	97. 1 96. 2 95. 3 94. 0 93. 8 93. 3	100. 4 100. 0 99. 0 97. 9 96. 5 95. 5	100. 0 103. 4 99. 4 100. 6 97. 7 99. 7	95, 8 94, 7 93, 4 93, 0 91, 1 90, 5	101, 101, 101, 102, 102, 102,
929—June December 930—June December 931—June December	99. 6 97. 7 93. 8 88. 3	103. 7 105. 7 101. 2 92. 1 80. 6 76. 2	92. 8 92. 2 91. 5 88. 1 83. 4 77. 6	94. 3 93. 3 92. 0 90. 1 87. 3 83. 9	97. 0 99. 1 95. 9 98. 1 93. 7 95. 3	90. 2 89. 9 88. 8 85. 1 79. 3 74. 9	103. 103. 103. 103. 102. 101.
932—June	76. 6 74. 5	67. 6 64. 7 64. 9 69. 6 73. 4 75. 3	73. 5 69. 5 68. 4 76. 2 77. 9 77. 8	78. 5 72. 7 66. 8 63. 9 62. 7 62. 7	88. 8 89. 8 84. 9 90. 0 87. 7 89. 0	68. 4 65. 6 65. 8 73. 5 75. 0 75. 5	100. 98. 96. 96. 96. 96.
935—March 15	81. 3 80. 6 82. 0 82. 4	79. 8 80. 2 80. 2 81. 6 79. 4 84. 0 84. 3 82. 9	78. 0 77. 8 78. 0 78. 3 78. 6 78. 4 78. 6 79. 6	62. 6 62. 7 63. 3 63. 5 63. 7 64. 2 64. 6 65. 4	89. 3 84. 9 87. 7 88. 3 88. 0 86. 1 87. 4 87. 8	76. 0 76. 2 77. 0 77. 0 77. 3 77. 5 78. 2 79. 2	96 96 96 96 96 96
937—March 15 June 15 September 15 December 15 938—March 15 June 15 September 15 December 15 December 15 1939—March 15 June 15	84. 5 85. 0 84. 5 83. 0 83. 3 82. 7 82. 7	85. 4 86. 3 85. 8 82. 6 78. 6 80. 2 78. 7 78. 6 76. 4	80. 9 82. 1 84. 0 84. 0 82. 8 82. 3 81. 7 81. 5 81. 1	65. 9 67. 5 68. 1 69. 3 69. 4 69. 7 69. 6 69. 6	88. 1 84. 9 86. 0 87. 3 88. 0 85. 5 86. 8 88. 0 88. 4		97 97 96 96 96 96 96 97 91

<sup>1</sup> Covers 51 cities since June 1920.

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50.1 51.6 53.9 56.8 70.4 81.9 84.3 92.9 99.2 103.2 103.2 102.5

102.0 100.4 99.5 99.2 98.9 99.0 99.1 99.6 100.0

99. 7 99. 8 99. 8 100. 2 100. 8 101. 1 101. 0 101. 4 101. 7 102. 1

102. 1 102. 8 103. 0 103. 4 103. 7 103. 4 102. 8 101. 8

100. 4 98. 8 96. 4 96. 8 96. 7 96. 7 96. 6 96. 7 96. 6 96. 5 96. 4 96. 5

96. 4 96. 5 96. 8 97. 7 98. 1 98. 5 98. 5 98. 5 98. 5

The indexes of the cost of goods purchased by wage earners and lower-salaried workers prepared by the Bureau of Labor Statistics show relative costs as of particular dates. For various purposes, however, it is often necessary to have estimates of annual average indexes. These estimates are, therefore, presented in table 4, for 32 cities combined, from 1913 through 1938. The annual average indexes have been computed as follows: The annual average food index is an average of the indexes (monthly, most years) falling within each year; the annual average indexes for clothing, rent, fuel and light, housefurnishing goods, and miscellaneous items are indexes of the weighted average of the aggregates for each pricing period affecting the year, the weights representing the relative importance of each pricing period. When these goods were priced only twice a year, in June and again in December, it is evident that prices in December of the previous year were more indicative of prices in the next month, January, even though it fell in a new year, than were the prices of the succeeding June. Therefore, costs in December of the preceding year and in June and December of the given year are all considered in arriving at an average cost for the year. The relative importance of each of these costs is expressed for December of the previous year by 2%, for June of the given year by 6, and for December of the given year by 3½. Weights for years in which pricing was done at other intervals will be furnished on request.

Table 4.—Estimated <sup>1</sup> Annual Average Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in 32 Large Cities Combined, 1913–38

[Average 1923-25=100]

Year	All items	Food 3	Clothing	Rent	Fuel and light	House- furnish- ing goods	Miscel- laneous
913	57.4	63. 1	55.7	61.4	53.9	47.7	50, 1
914	58, 2	64.6	56. 1	61.4	54.3	49.0	51. 2
915	58.8	63. 9	57.4	61.9	54. 5	51.3	52.8
916	63. 2	71.7	62.9	62.6	56.6	57. 2	55. 5
917	74.4	92, 4	75.6	62. 1	63. 0	66. 9	64. 2
918	87. 2	106. 2	102.5	63. 2	73.3	85.9	76. 7
919	101. 1	120. 2	135.7	68. 4	79.4	108. 2	86. 3
920	116. 2	133. 1	161.6	80.4	93. 1	132.8	99. 1
921	103.6	101.6	124. 4	92.4	99.3	111.8	102. 8
922	97. 2	95. 0	101.0	95. 1	98. 6	94.8	99.7
923	99.0	97. 9	101. 2	97.5	100.3	101.8	99. 3
924	99. 2	97.0	100.4	101.0	99. 1	100.1	99.8
925	101.8	105, 0	98.4	101.5	100.6	98. 1	100.8
926	102.6	108. 5	97.0	100.5	102, 2	95.9	101. 1
927	100.6	104. 5	95. 1	98. 9	100. 6	93. 6	101.7
928	99.5	103.3	93.7	96, 5	98. 9	91.3	102, 3
929	99. 5	104.7	92,7	94. 3	98. 2	90. 2	103.
930	97. 0	99. 6	90.7	91.7	97. 2	87.9	103.
931	88.6	82. 0	82.7	86. 9	95.1	79. 2	102.
932	79.8	68. 3	73. 2	78. 0	90.4	68. 9	100.
933	75.8	66.4	70.9	67. 2	87.4	68. 0	97.
934	78.6	74. 1	77. 5	62. 9	88. 6	74. 9	96.
935	80.7	80. 5	77.9	62. 9	87.5	76.4	96,
936		82. 1	78.7	64. 2	87. 5	77.8	96.
937	84.3	85. 1	82.4	67. 4	86. 6	84. 9	97.
1938	83. 0	78. 9	82.3	69, 5	87.0	84.5	98.

<sup>1</sup> For explanation of method used, see above.

<sup>1</sup> Covers 51 cities since June 1920.

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Table 5 presents June 15, 1939, indexes of living costs for families of wage earners and lower-salaried workers based on average costs in the years 1923-25 as 100, for each of the 32 cities, by groups of items.

Table 5.—Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers, by Groups of Items, June 15, 1939

[Average 1923-25=100]

City	All items	Food	Clothing	Rent	Fuel and light	House- furnish- ing goods	Miscel- laneous
Average: 32 large cities	81.7	1 76. 3	80. 9	69. 5	85. 4	83. 2	98.5
New England: Boston Portland, Maine	81. 5 83. 8	73. 1 76. 3	85. 2 82. 4	75. 2 76. 3	84. 4 79. 2	81. 5 89. 8	98.1 103.0
Middle Atlantic: Buffalo New York Philadelphia Pittsburgh Scranton	83. 0 81. 3 81. 0	77. 5 77. 4 78. 3 74. 1 73. 5	80. 3 78. 6 76. 1 80. 7 82. 9	73. 4 77. 8 69. 3 70. 6 71. 7	95. 8 84. 3 78. 7 100. 6 72. 4	90. 3 77. 3 81. 4 82. 7 85. 5	97.8 99.6 97.6 95.9 96.4
East North Central: Chicago Cincinnati Cleveland Detroit Indianapolis	84. 5 85. 7 78. 9	77. 1 75. 4 78. 4 74. 1 77. 5	74. 2 80. 6 84. 0 82. 0 79. 0	60. 5 76. 5 69. 0 66. 4 66. 1	89. 1 93. 4 112. 2 77. 5 82. 5	74. 3 93. 1 79. 6 82. 7 89. 1	99. 8 101. 2 104. 2 95. 3 93. 5
West North Central: Kansas City Minneapolis St. Louis	81. 5 84. 3	78. 0 84. 5 80. 8	80. 7 79. 1 82. 0	61. 5 72. 3 58. 1	79. 9 88. 7 83. 7	79. 0 88. 4 90. 1	101.7 96.1 102.1
South Atlantic: Atlanta Baltimore Jacksonville Norfolk Richmond Savannah Washington, D. C.	78. 9 85. 5 78. 8 83. 6 82. 2 80. 2	70. 7 82. 0 74. 3 73. 8 68. 8 75. 6 78. 3	83. 3 81. 8 80. 2 87. 5 89. 5 83. 6 82. 6	65. 2 76. 1 59. 5 64. 8 73. 3 64. 2 86. 6	68. 2 79. 1 87. 5 79. 5 80. 9 82. 7 82. 2	88. 9 83. 1 81. 2 85. 2 90. 4 87. 1 89. 7	94. 9 103. 8 90. 3 104. 0 99. 2 91. 4 99. 9
East South Central: Birmingham Mem. his Mobile	75. 7 80. 2	65. 0 71. 6 74. 2	86, 6 87, 0 88, 5	59. 4 62. 4 67. 4	73. 4 85. 3 69. 4	81.3 93.5 88.8	93.9 95.3 97.0
West South Central: Houston New Orleans	81.3	75. 1 81. 7	76. 7 80. 5	74. 5 73. 6	73. 4 73. 4	92. 3 93. 4	94.0
Mountain: Denver	1	82.3	77.8	64. 4	75. 2	88.7	98.
Pacific: Los Angeles Portland, Oreg San Francisco Seattle	77. 7 82. 8 86. 7	70. 0 79. 1 78. 2 78. 6	85. 8 81. 4 92. 0	55. 0 61. 6 73. 9 70. 9	81. 5 82. 7 78. 9	82. 8 84. 9 88. 8 90. 1	94. 100. 105. 101.

<sup>1</sup> Includes 51 cities.

Table 6 presents indexes of the cost of all goods purchased by wage earners and lower-salaried workers in each of the 32 cities, for each date from June 1926 through June 15, 1939, on the 1923–25 base. It is planned to publish these indexes for each group of items in each December report, and to publish only the indexes of the cost of all goods in the March, June, and September reports. Mimeographed tables of indexes for individual cities are available upon request.

Table 6.-Indexes of Cost of all Goods Purchased by Wage Earners and Lower-Salaried Workers in Each of 32 Large Cities, June 1926 through June 15, 1939

	New Er	ngland		Mic	ldle Atlan	tie		East North Central
Date	Boston	Port- land, Maine	Buffalo	New York	Phila- delphia	Pitts- burgh	Scran- ton	Chicago
1926—June	102. 5	102. 0	104. 6	102. 4	104. 8	103. 6	104. 1	102. 9
December	103. 5	101. 8	103. 7	102. 7	104. 5	103. 2	103. 8	102. 9
1927—June	101. 9	101. 7	103. 3	101. 8	103. 3	103. 0	103. 5	102. 6
December	102. 2	100. 4	101. 7	102. 5	102. 2	101. 3	102. 4	100. 2
1928—June	99. 5	98. 9	101. 5	100. 3	101 0	99. 9	101. 7	99. 0
December	100. 9	100. 0	101. 0	101. 1	99. 6	101. 0	101. 9	99. 3
1929—June	99. 6	99. 7	101. 3	100. 7	99. 2	100. 8	101. 4	98. 9
December	101. 4	100. 4	101. 7	101. 5	99. 9	100. 2	101. 6	99. 7
1930—June	98. 7	98. 4	100. 3	98. 8	97. 6	98. 6	99. 0	97. 8
December	95. 9	95. 4	95. 6	96. 5	94. 3	93. 8	95. 2	93. 5
1931—June	89. 4	90. 9	90. 0	91. 2	89. 7	88. 4	88. 7	88. 0
December	87. 2	88. 1	85. 7	88. 1	86. 3	84. 7	85. 5	84. 4
1932—June	80. 5	83. 5	82. 3	84. 2	80. 4	78. 7	80. 1	77. 1
	78. 6	79. 9	78. 4	81. 0	76. 8	76. 0	78. 0	73. 4
	76. 6	78. 6	76. 6	78. 1	74. 9	73. 2	75. 8	70. 7
	79. 7	82. 5	78. 8	80. 5	78. 4	76. 0	80. 0	72. 4
1934—June	81. 3	83. 6	80. 2	81. 8	79. 9	77. 7	80. 8	72. 7
	82. 0	84. 4	79. 9	82. 1	79. 6	77. 8	80. 6	73. 5
	82. 9	84. 6	81. 6	83. 6	80. 4	79. 2	81. 9	76. 2
	82. 7	85. 3	82. 0	83. 1	80. 4	79. 1	82. 1	76. 0
	82. 9	85. 0	81. 6	83. 4	80. 9	79. 6	82. 8	76. 1
1936—January 15	83. 0	85. 3	82. 5	84. 2	81. 9	79. 9	83. 2	76, 7
	82. 6	84. 7	81. 8	83. 0	81. 3	79. 1	81. 8	76, 2
	84. 2	86. 5	84. 1	83. 8	82. 1	80. 7	83. 2	77, 6
	83. 5	85. 7	83. 3	84. 4	82. 1	80. 8	83. 2	78, 4
	83. 3	85. 8	83. 8	84. 3	82. 5	80. 8	83. 7	78, 5
1937—March 15	84. 2	86. 6	84. 9	85. 1	83. 4	82. 1	84. 0	80. 0
	85. 1	87. 6	87. 1	84. 9	84. 0	84. 6	84. 9	81. 2
	86. 5	87. 7	86. 4	86. 7	84. 3	84. 9	84. 2	81. 3
	84. 5	86. 4	86. 5	86. 5	83. 2	83. 5	82. 9	80. 8
1938—March 15	82. 4	85. 0	85. 0	84. 0	82. 4	82. 4	82. 0	79. 4
	83. 0	85. 1	84. 1	84. 3	83. 1	82. 9	82. 1	80. 5
	82. 9	84. 6	83. 6	84. 3	82. 5	82. 6	80. 7	79. 7
	82. 3	84. 1	84. 6	84. 8	81. 9	82. 3	81. 3	79. 3
1939—March 15	81. 6	83. 3	84. 1	83. 7	81. 2	80. 6	80. 6	78. 5
	81. 5	83. 8	83. 7	83. 0	81. 3	81. 0	80. 4	78. 2
Date	East N	orth Cen	tral—Con	tinued	West	North C	entral	South Atlantic
2410	Cincin- nati	Cleve- land	Detroit	Indian- apolis	Kansas City	Minne- apolis	St. Louis	Atlanta
1926—June	105. 4	102. 6	101. 4	101. 9	101. 5	102. 5	104. 2	102. 7
December	104. 6	101. 8	100. 4	101. 2	99. 6	100. 9	103. 7	100. 9
1927—June	106. 5	102. 0	100. 6	102. 3	99. 5	101. 1	104. 1	103. 1
December	102. 3	99. 4	97. 5	98. 4	96. 1	98. 2	100. 8	98. 1
1928—June December 1929—June December	102.0	99. 2 98. 1 98. 6 97. 8	96. 2 96. 3 97. 1 96. 9	98. 0 97. 4 97. 4 98. 4	95. 6 95. 5	98. 5 97. 6 97. 9 99. 0	100. 2 99. 8 100. 8 101. 6	99. 0 98. 7 97. 6 97. 4
1930—June	98. 8 92. 8	97. 8 93. 3 87. 3 84. 3	94. 6 88. 3 82. 4 77. 2	97. 1 91. 9 85. 3 81. 7	92. 6 88. 9	98. 0 94. 0 89. 6 86. 6	99. 5 94. 7 88. 5 84. 0	89. 9 84. 4
1932—June December 1933—June December	82.9 79.7 78.3	80. 5 76. 4 75. 2 77. 2	71. 6 67. 9 65. 7	77. 0 73. 9 73. 0 75. 5	79. 0 76. 9 75. 5	80. 9 78. 2 74. 6 78. 2	79. 5 76. 4 75. 1	75. 9 71. 9 71. 3

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Table 6.—Indexes of Cost of all Goods Purchased by Wage Earners and Lower-Salaried Workers in Each of 32 Large Cities, June 1926 through June 15, 1939—Continued

[Average 1923-25=100]

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	Date	East N	orth Cen	tral—Con	tinued	West No	rth Centr		South Atlan- tic-Con.
		Cincin- nati	Cleve- land	Detroit	Indian- apolis	Kansas City	Minne- apolis	St. Louis	Atlanta
1934—J	une	81.7	78. 6	71. 5	77. 0	77. 9	79. 2	78.7	75.8
	November 15	82. 2	78.8	71.9	76. 5	79. 2	79.6	79.4	77.1
	March 15	85, 1 84, 0	81. 3 81. 4	74. 2 75. 1	78. 9 78. 8	80. 4 79. 5	81. 3 81. 5	81.4	78.4
(	October 15	84. 5	81.5	75. 9	79. 1	80. 1	81. 3	81. 6 81. 2	78.3
	January 15	85. 2	81.7	76. 7	79.8	80. 2	82 6	- 82 1	79.6
1	April 15	84. 3	81.7	77.0	79. 2	79.6	81.8	81.4	79.9 79.0
J	July 15	87. 2	83. 4	78. 9	81. 4	81. 9	83. 9	82.8	80.6
	September 15	87. 4 86 2	84. 3 83. 8	79. 0 78. 8	81. 8 81. 5	82, 9 82, 0	84. 5 84. 7	83.8	81.5
	December 15							82. 9	81.3
	March 15	88. 6 89. 0	85. 4 86. 5	80. 9 82. 5	83, 5 84, 5	84. 1 85. 3	86. 8 86. 6	84. 7 85. 4	82.4
	September 15		86. 9	82. 3	83.6	84. 5	86. 0	85. 8	83. ( 83. (
J	December 15	88.3	87.0	83. 3	83. 1	83. 2	85. 9	84.8	82.1
938-1	March 15	86.8	86.0	81.9	81.9	82.0	84.8	83.5	80.
J	June 15	87. 2	86.3	81.5	82. 4	82, 6	85. 6	83. 8	80.
	September 15		85.8	80.0	81.5	81.8	83.9	83. 2	80,
	December 15	85.7	85.8	79.8	81. 4	81.9	84. 2	82. 9	80.
	March 15	84. 8 84. 5	85. 9 85. 7	79. 3 78. 9	81. 1	81.5	84. 2	82 7	79.
-	ине 19	64. 0	80. /	78. 9	81. 1	81. 5	84. 3	82. 2	78.
			Sout	h Atlanti	e-Contin	nued		East	South itral
	Date	Balti-	Jackson-		Rich-	Savan-	Wash-	Birming-	2.5
		more	ville	Norfolk	mond	nah	ington, D. C.	ham	Mem- phis
926—1	June	103. 4	109.0	101.7	104. 7	102. 4	103. 2	103.0	100.
007	December	102.5	107.7	101.4	102.9	101.6	102.5	102.1	100.
921-3	June December	102. 1 100. 1	104. 8 102. 0	102. 3 100. 3	103. 0 99. 7	101. 1	100. 5 99. 5	100.7 100.0	99. 97.
							00.0	100.0	01.
928-1		100. 1	98.7	99.6	100.0	99. 2	99. 1	98. 2	96,
	December	99. 1 99. 7	98. 2 97. 2	99. 9 99. 7	98. 5 97. 7	99. 8 99. 0	98.6 99.0	97. 5 96. 9	97 97
]	December	100. 5	96. 1	100.6	98.6	98. 9	98. 9	96.1	96
	_	00.5		00.0		00.0			
	June December	99. 5 95. 8	94. 1 90. 6	98. 8 95. 4	98. 1 93. 5	96. 9 93. 2	97. 4 94. 7	94. 2 89. 3	96 91
931-3	June	90.8	85. 4	89. 8	88. 2	89. 3	89.6	80.7	85
]	December	87.9	81. 2	86. 2	85. 6	84. 3	87.0	76.9	82
932—3	June	82.7	76.3	81.2	80. 3	79. 1	82.0	70.9	77
. 1	December	79.9	73.5						
				78.7	77.1	76.7	79.1	68.5	73
1933—.	June	77.7	71.3	75. 9	75.7	76. 7 74. 6	79. 1 78. 1	67.2	72
1933—	June December	77. 7 81. 4				76.7	79.1		72
1933—.	June December	77. 7 81. 4	71. 3 75. 5 76. 6	75. 9 80. 9 82. 5	75. 7 79. 9 80. 9	76. 7 74. 6	79. 1 78. 1	67. 2 70. 2 71. 0	
1933—	June	77. 7 81. 4 82. 0 82. 9	71. 3 75. 5 76. 6 77. 2	75. 9 80. 9 82. 5 82. 9	75. 7 79. 9 80. 9 81. 7	76. 7 74. 6 78. 3 78. 9 79. 4	79. 1 78. 1 81. 8 83. 0 83. 9	67. 2 70. 2 71. 0 73. 4	70
934—	June December June November 15 March 15	77. 7 81. 4 82. 0 82. 9 83. 9	71. 3 75. 5 76. 6 77. 2 77. 8	75. 9 80. 9 82. 5 82. 9 83. 7	75. 7 79. 9 80. 9 81. 7 82. 9	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0	79. 1 78. 1 81. 8 83. 0 83. 9 85. 3	67. 2 70. 2 71. 0 73. 4 73. 4	7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7
933— 934— 935—	June December  June November 15 March 15 July 15	77. 7 81. 4 82. 0 82. 9	71. 3 75. 5 76. 6 77. 2	75. 9 80. 9 82. 5 82. 9	75. 7 79. 9 80. 9 81. 7	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2	79. 1 78. 1 81. 8 83. 0 83. 9	67. 2 70. 2 71. 0 73. 4	71 70 71 71 71 71
934—	June December June November 15 March 15 July 15 October 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2	79. 1 78. 1 81. 8 83. 0 83. 9 85. 3 85. 6 86. 3	67. 2 70. 2 71. 0 73. 4 73. 4 73. 9 75. 3	7: 7: 7: 7: 7: 7: 7: 7:
933—	June December June November 15 March 15 July 15 October 15 January 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2	79. 1 78. 1 81. 8 83. 0 83. 9 85. 3 85. 6 86. 3	67. 2 70. 2 71. 0 73. 4 73. 9 75. 3	7: 76 7: 7: 7: 7: 7: 7: 7:
934— 935— 936—	June June November 15 March 15 July 15 October 15 January 15 April 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9 79. 4 78. 5	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1 84. 9 83. 7	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6 83. 6 82. 8	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2 81. 2 79. 4	79. 1 78. 1 81. 8 83. 0 83. 9 85. 3 85. 6 86. 3	71. 0 73. 4 73. 4 73. 9 75. 3 75. 0 73. 9	777777777777777777777777777777777777777
933— 934— 935— 936—	June December June November 15 March 15 July 15 October 15 January 15 April 15 July 15 July 15 September 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9 85. 6 85. 0 86. 0	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2	79. 1 78. 1 81. 8 83. 0 83. 9 85. 3 85. 6 86. 3	67. 2 70. 2 71. 0 73. 4 73. 9 75. 3	777777777777778
934— 935— 936—	June December June November 15 March 15 July 15 October 15 January 15 April 15 July 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9 85. 6 85. 0 86. 0	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9 79. 4 78. 5 80. 2	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1 84. 9 83. 7 84. 8	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6 83. 6 82. 8 84. 3	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2 79. 4 80. 7	79. 1 78. 1 81. 8 83. 0 83. 9 85. 3 85. 6 86. 3 86. 7 85. 5 87. 0	67. 2 70. 2 71. 0 73. 4 73. 4 73. 9 75. 0 73. 9 76. 0	7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 8: 8: 8:
934— 935— 936—	June December June November 15 March 15 July 15 October 15 January 15 April 15 July 15 September 15 December 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9 85. 6 85. 0 86. 0 86. 4	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9 79. 4 78. 5 80. 2 80. 1 80. 4	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1 84. 9 83. 7 84. 8 85. 2 85. 7	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6 83. 6 82. 8 84. 3 85. 5 86. 0	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2 79. 4 80. 7 81. 0 81. 1	79. 1 78. 1 81. 8 83. 0 83. 9 85. 3 85. 6 86. 7 85. 5 87. 0 87. 4	67. 2 70. 2 71. 0 73. 4 73. 9 75. 0 75. 0 76. 0 76. 5 76. 4	7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 8: 8: 8: 8: 8: 8:
934— 935— 936—	June December June November 15 March 15 October 15 January 15 April 15 July 15 September 15 December 15 March 15 March 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9 85. 6 85. 0 86. 4 86. 4	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9 79. 4 78. 5 80. 2 80. 1 80. 4	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1 84. 9 83. 84. 9 85. 2 85. 7	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6 83. 6 84. 3 85. 5 86. 0	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2 79. 4 80. 7 81. 0 81. 1	79. 1 78. 1 81. 8 83. 0 83. 9 85. 3 85. 6 86. 7 85. 5 87. 0 87. 4 87. 6	67. 2 70. 2 71. 0 73. 4 73. 9 75. 3 75. 0 73. 9 76. 0 76. 5 76. 4	7: 74 77 77 77 77 77 77 77 88 88 88 88
933— 934— 935— 936—	June December June November 15 March 15 July 15 October 15 January 15 April 15 July 15 September 15 December 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9 85. 6 85. 0 86. 0 86. 4	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9 79. 4 78. 5 80. 2 80. 1 80. 4	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1 84. 9 83. 7 84. 8 85. 2 85. 7	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6 82. 8 84. 3 85. 5 86. 0	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2 79. 4 80. 7 81. 0 81. 1	79. 1 78. 1 81. 8 83. 0 83. 9 85. 3 85. 6 86. 3 86. 7 85. 5 87. 0 87. 4 87. 6	67. 2 70. 2 71. 0 73. 4 73. 4 73. 9 75. 3 75. 0 76. 0 76. 5 76. 4 78. 7 79. 6	77 77 77 77 77 77 77 77 78 88 88 88
934— 935— 936—	June December June November 15 March 15 July 15 October 15 January 15 April 15 July 15 September 15 December 15 March 15 June 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9 85. 6 86. 0 86. 4 86. 4	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9 79. 4 78. 5 80. 2 80. 1 80. 4	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1 84. 9 83. 84. 9 85. 2 85. 7	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6 83. 6 84. 3 85. 5 86. 0	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2 79. 4 80. 7 81. 0 81. 1	79. 1 78. 1 81. 8 83. 0 83. 9 85. 3 85. 6 86. 7 85. 5 87. 0 87. 4 87. 6	67. 2 70. 2 71. 0 73. 4 73. 9 75. 3 75. 0 73. 9 76. 0 76. 5 76. 4	77 77 77 77 77 77 77 77 78 88 88 88
934— 935— 936—	June December June November 15 March 15 July 15 October 15 January 15 April 15 July 15 September 15 December 15 March 15 June 15 September 15 December 15 December 15 December 15 December 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9 85. 6 85. 0 86. 4 86. 4 87. 0 87. 4 88. 2 87. 7	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9 79. 4 78. 5 80. 2 80. 1 80. 4 81. 5 82. 1 82. 4 82. 0	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1 84. 9 83. 7 84. 8 85. 2 85. 7 86. 8 86. 9 86. 3	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6 83. 6 82. 8 84. 3 85. 5 86. 0 86. 5 86. 3 86. 9 85. 4	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2 79. 4 80. 7 81. 0 81. 1 81. 8 82. 5 83. 3 82. 8	79. 1 78. 1 81. 8 83. 0 83. 9 85. 3 85. 6 86. 7 85. 5 87. 0 87. 4 87. 6 87. 8 88. 7 89. 7 88. 8	67. 2 70. 2 71. 0 73. 4 73. 9 75. 3 75. 0 73. 9 76. 0 76. 5 76. 4 78. 7 79. 6 79. 5	777777777788888888888888888888888888888
934— 935— 936— 937—	June December June November 15 March 15 October 15 January 15 April 15 July 15 September 15 December 15 March 15 June 15 September 15 March 15 December 15 March 15 December 15 March 15 March 15 March 15 March 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9 85. 6 86. 0 86. 4 86. 4 87. 0 87. 4 88. 2 87. 7	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9 79. 4 78. 5 80. 2 80. 1 80. 4 81. 5 82. 1 82. 4 82. 0	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1 84. 9 83. 7 84. 8 85. 2 85. 7 86. 8 86. 9 86. 3	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6 83. 6 82. 8 84. 3 85. 5 86. 0 86. 5 86. 3 86. 9 85. 4	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2 79. 4 80. 7 81. 0 81. 1 81. 8 82. 5 83. 3 82. 8 81. 4	79. 1 78. 1 81. 8 83. 0 85. 9 85. 3 85. 6 86. 3 86. 7 85. 5 87. 0 87. 4 87. 6 87. 8 88. 7 89. 7 88. 8	67. 2 70. 2 71. 0 73. 4 73. 4 73. 9 75. 3 75. 0 76. 0 76. 5 76. 4 78. 7 79. 6 79. 5 79. 0	77 77 77 77 77 77 77 88 88 88 88 88 88 8
934— 935— 936— 937—	June December June November 15 March 15 July 15 October 15 January 15 April 15 July 15 September 15 December 15 March 15 December 15 December 15 March 15 December 15 March 15 December 15 March 15 September 15 March 15 September 15 March 15 September 15 March 15 September 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9 85. 6 85. 0 86. 4 87. 0 87. 4 88. 2 87. 7 86. 3	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9 79. 4 78. 5 80. 1 80. 4 81. 5 82. 1 82. 4 82. 0 90. 0 79. 8	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1 84. 9 83. 7 84. 8 85. 2 85. 7 86. 5 86. 8 86. 9 86. 3	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6 82. 8 84. 3 85. 5 86. 0 86. 5 86. 3 86. 9 85. 4	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2 81. 2 79. 4 80. 7 81. 0 81. 1 81. 8 82. 5 83. 3 82. 8 81. 4 81. 2	79. 1 78. 1 81. 8 83. 0 85. 9 85. 6 86. 3 86. 7 85. 5 87. 0 87. 4 87. 6 87. 8 88. 7 88. 7 88. 8	67. 2 70. 2 71. 0 73. 4 73. 4 73. 9 75. 3 75. 0 76. 0 76. 5 76. 4 78. 7 79. 6 79. 5 79. 0	77 77 77 77 77 77 77 77 77 77 88 88 88 8
933— 1934— 1935— 1936— 1937—	June December June November 15 March 15 October 15 January 15 April 15 July 15 September 15 December 15 March 15 June 15 September 15 March 15 December 15 March 15 December 15 March 15 March 15 March 15 March 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9 85. 6 85. 0 86. 4 87. 0 87. 4 88. 2 87. 7 86. 3	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9 79. 4 78. 5 80. 2 80. 1 80. 4 81. 5 82. 1 82. 4 82. 0	75. 9 80. 9 82. 5 82. 9 83. 7 83. 3 84. 1 84. 9 83. 7 84. 8 85. 2 85. 7 86. 8 86. 9 86. 3	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6 83. 6 82. 8 84. 3 85. 5 86. 0 86. 5 86. 3 86. 9 85. 4	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2 79. 4 80. 7 81. 0 81. 1 81. 8 82. 5 83. 3 82. 8 81. 4	79. 1 78. 1 81. 8 83. 0 85. 9 85. 3 85. 6 86. 3 86. 7 85. 5 87. 0 87. 4 87. 6 87. 8 88. 7 89. 7 88. 8	67. 2 70. 2 71. 0 73. 4 73. 4 73. 9 75. 3 75. 0 76. 0 76. 5 76. 4 78. 7 79. 6 79. 5 79. 0	7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7
1934— 1935— 1936— 1937—	June December June November 15 March 15 July 15 October 15 January 15 April 15 July 15 September 15 December 15 March 15 December 15 December 15 March 15 December 15 March 15 December 15 March 15 September 15 March 15 September 15 March 15 September 15 March 15 September 15	77. 7 81. 4 82. 0 82. 9 83. 9 84. 5 84. 9 85. 6 85. 0 86. 4 87. 0 87. 4 88. 2 87. 7 86. 3 86. 3 86. 5	71. 3 75. 5 76. 6 77. 2 77. 8 78. 6 78. 9 79. 4 78. 5 80. 2 80. 1 80. 4 81. 5 82. 1 82. 4 82. 0 79. 8 79. 9	75. 9 80. 9 82. 5 82. 9 83. 7 83. 7 84. 1 84. 9 83. 7 84. 8 85. 2 85. 7 86. 5 86. 8 86. 9 86. 3	75. 7 79. 9 80. 9 81. 7 82. 9 82. 7 83. 6 82. 8 84. 3 85. 5 86. 0 86. 5 86. 3 86. 9 85. 4 84. 0 83. 1 83. 5	76. 7 74. 6 78. 3 78. 9 79. 4 80. 0 80. 2 81. 2 81. 2 79. 4 80. 7 81. 0 81. 1 81. 8 82. 5 83. 3 82. 8 81. 4 81. 2 80. 8	79. 1 78. 1 81. 8 83. 0 83. 9 85. 3 85. 6 86. 3 86. 7 87. 4 87. 6 87. 8 88. 7 88. 7 88. 8 87. 1 87. 2 87. 1	67. 2 70. 2 71. 0 73. 4 73. 4 73. 9 75. 3 75. 0 76. 0 76. 5 76. 4 78. 7 79. 6 79. 5 79. 0 77. 6 77. 2 77. 2 76. 8	777 777 777 777 777 777 778 88 88 88 88

TABLE 6.—Indexes of Cost of all Goods Purchased by Wage Earners and Lower-Salaried Workers in Each of 32 Large Cities, June 1926 through June 15, 1939—Continued [Average 1923-25=100]

Salaried

South Atlantic-Con.

Atlanta

75. 8 77. 1 78. 4 78. 3 79. 6 79. 9 79. 0 80. 6 81. 5 81. 3

82.4 83.0 83.9 82.3

80.5 80.3 80.0 80.3 79.3 78.9

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77. 0 78. 8 79. 5 78. 6 78. 7

79. 4 79. 3 80. 5 81. 1 81. 5

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81 6

 $80.2 \\ 80.2$ 

tinued

Date	East South Central— Con.	West Cen		Moun- tain		Pac	ific	
	Mobile	Houston	New Orleans	Denver	Los Angeles	Port- land, Oreg.	San Fran- cisco	Seattle
926—June	103. 8 104. 0	99. 9 100. 4	100. 0 101. 0	101. 2 100. 2	96. 7 96. 9	99. 4 99. 1	101. 0 101. 1	101. 10 <b>0</b> .
December	103. 6	98. 3	101. 0	100. 2	97.0	98. 9	101. 1	101.
927—June December		98. 6	99. 9	96. 4	95. 5	97.3	100. 5	98.
928 June	101. 4	96. 7	98. 8	95. 9	93.8	95. 7	99. 5	98.
December	101.8	97.6	99.6	96. 3	95. 1	96. 3	100.8	98.
929-June	101. 0	97.4	98.3	96.6	94. 1	95. 1	100. 0	99.
December	101. 6	98. 6	98. 9	96. 7	94. 0	95. 8	100. 3	99.
930—June	99. 9	96. 1	96. 7	95. 5	91.7	95.0	98. 2	98.
TAGODITANOS	00.0	91.3	92.6	91. 1	88.1	89. 6	94. 9	93.
931-June December	88. 9 85. 3	86. 0 83. 4	85. 1 84. 5	86. 5 82. 9	82. 4 80. 7	85, 5 82, 9	89. 7 86. 9	90. 87.
932—June	79.1	76. 2	79.3	78. 2	75. 5	77.4	82. 3	82.
December	77. 0	72. 2	77.6	75. 5	73. 1	75. 2	80, 6	78.
933-June.	74. 9 79. 2	71. 6 75. 1	75. 4 79. 1	74. 5 76. 1	69. 8 72. 5	72. 7 74. 4	78. 6 81. 8	78. 79.
December				1				
934-June		75.8	79. 1	77.8	72.1	75. 5	82. 5	79
November 15		78.3	81.0	79.0	74. 2	77. 2	84. 4	80.
935-March 15		79. 3 78. 2	82, 0 81, 9	81. 2 81. 2	75. 5 74. 6	78. 8 78. 8	84. 8 83. 2	82. 82.
July 15 October 15		79. 4	81.4	80.8	74.8	79. 3	84. 0	82.
936-January 15	81.7	80. 3	81.7	81.5	75.4	80.7	84.5	83.
April 15	81.0	79. 5	80.8	81.1	74.7	80. 8	84. 0	83.
July 15	82.7	80.9	82. 2	83.0	75. 2	82.0	84.5	84.
September 15.		81.5	82. 6	83. 4	76. 3	81. 9	84.8	84.
December 15	82. 1	81.9	83. 0	83. 1	77. 1	82. 5	84. 9	84.
937-March 15		83. 2	84.0	85. 0	79.8	85. 0	86, 8	87
June 15	84.9	82. 8 84. 0	84. 2 85. 2	85. 9 85. 8	79. 4	85.6	87.5	88
September 15 December 15		83. 9	84. 4	85. 4	79. 5 79. 2	85. 9 85. 0	88. 6 89. 2	88. 88.
938—March 15	83, 5	82.6	83. 9	84.0	78. 1	84.3	87.8	87
June 15		82.0	83. 2	84.4	78.6	83. 7	88. 2	87
September 15	82.6	82.0	83.7	82.8	78.3	82. 9	88. 3	86
December 15	82. 3	82. 2	83. 6	82, 8	78. 9	83. 3	88. 3	87
939-March 15	82. 2	81.4	83. 4	82.4	78.2	82.7	87.5	86

## Description of the Indexes

A summary discussion of the method of preparing these indexes and of their uses in showing temporal changes in the cost of goods and services purchased by wage earners and lower-salaried workers in each of 32 large cities of the United States and in these cities combined is presented in the March and July 1938 issues of the Monthly Labor Review. In that discussion, it is pointed out that the only comparison between cities that can be drawn from the Bureau's indexes is a comparison of the extent of change in living costs in different cities over given periods. Thus, the index of the cost of all items as of June 15, 1939, based on costs in 1923–25 as 100, was 87.1 in Seattle

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and 75.7 in Birmingham. A comparison of these two indexes indicates that on June 15, 1939, living costs in Birmingham were 24,3 percent lower than the average for the years 1923-25, but that in Seattle, costs on this date were only 12.9 percent lower. This comparison does not indicate that costs on June 15, 1939, were 15 percent higher in Seattle than in Birmingham. In order to secure figures showing a comparison of actual living costs between cities, expenditures serving as the weights for items priced in the different cities would have to be representative of identical levels of living. Differences between the average costs from which the Bureau of Labor Statistics indexes are computed in different cities are due to differences in standards and in purchasing habits in those cities as well as to varying prices for goods of given grades. Differences between the indexes of costs from time to time in the various cities at any particular date are due entirely to differences in the percentage of change in living costs in each city.

The comparison of the cost of the same level of living from one part of the country to another presents serious technical difficulties for which wholly satisfactory techniques have not yet been developed. This is particularly true in attempting to measure differences in living costs from large to very small cities or from urban to rural communities, where consideration must be given not only to differences in such factors as climate and consumption habits, but also to differences in housing, the fuels available, and the means of transportation.

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## ESTIMATED INTERCITY DIFFERENCES IN COST OF LIVING, JUNE 15, 1939

IN March 1935, the Division of Social Research of the Works Progress Administration conducted a study of comparative living costs in 59 cities. The purpose of this study was to determine the cost of a uniform level of living in these cities at a given time, and how its cost compared from one city to another. Quantity budgets were constructed by the Works Progress Administration to represent the needs of families at two levels of living, the "basic maintenance" level and "emergency" level. An identical budget for each of these levels of living, with certain adjustments in the fuel, ice, and transportation lists to take account of climatic and other local conditions, was used in each city. The Bureau of Labor Statistics cooperated with the Division of Social Research of the Works Progress Administration in obtaining the prices necessary to compute the costs of the two budgets, using descriptive specifications to facilitate pricing identical commodities and services from city to city. Insofar as possible, prices for identical commodities were obtained in each city.

Details of this study and a description of the goods and services included in each budget can be found in the report "Intercity differences in costs of living in March 1935, 59 cities," Research Monograph XII, a copy of which may be obtained from the Division of Research, Work Projects Administration, Washington, D. C.

Between March 1935 and the spring of 1939, no attempt was made to price these budgets. In order to bring the intercity comparison of costs up to date, estimates of the cost of the "maintenance" budget were made, however, for the 31 cities covered by both the Works Progress Administration study and the Bureau of Labor Statistics studies of changes in the cost of goods purchased by wage earners and lower-salaried workers. By applying the Bureau of Labor Statistics indexes of living costs, which show changes in costs from time to time, to the Works Progress Administration data on intercity differences in costs in March 1935, approximate intercity comparisons of costs were obtained. Since the cost-of-living indexes of the Bureau of Labor Statistics are based on a budget weighted differently from the budget used in the Works Progress Administration study, when the two sets of figures were combined, the resulting estimates of intercity differences in costs were merely approximations.

Early in 1939, the Bureau of Labor Statistics made a study of comparative living costs in 10 small cities. This study of "Differences in living costs in northern and southern cities" was made at the request of the Wage and Hour Division. Reprints of an article which appeared in the July 1939 Monthly Labor Review describing the survey are available on request to the Bureau of Labor Statistics.

In connection with this study of comparative living costs in 10 small cities, the Works Progress Administration "maintenance" budget was, in part, priced again for 31 large cities, using prices obtained as of December 15, 1938, and February 14, 1939.

The cost of the clothing, housefurnishings, fuel and light, and miscellaneous groups were recomputed on the basis of prices of 55 articles of clothing, 16 articles of furniture and furnishings, 5 items of fuel and light, and 37 miscellaneous items on December 15, 1938, and weighted by the quantities provided in the "maintenance" budget. The food cost budget was entirely recomputed in terms of the "adequate diet at minimum cost" of the United States Bureau of Home Economics (a somewhat more varied diet than that originally used in the "maintenance" budget). The cost of this budget was computed for 31 large cities with prices of the 89 foods priced by the Bureau of Labor Statistics for its indexes of changes in food costs. Average rents in each of the 31 cities were estimated by applying the Bureau's time-to-time indexes of rental costs to the Works Progress Administration's figures for March 1935.

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The Bureau of Labor Statistics has prepared approximations for June 15, 1939, by applying the Bureau's indexes of living costs which show changes in cost from time to time, to the costs estimated by the Bureau as of December 15, 1938, for all items other than food. The food data were recalculated as of June 13, 1939. Table 7 shows estimated cost of living for a four-person manual worker's family, at the "maintenance" level as defined by the Works Progress Administration in 31 large cities, as of June 15. Table 8 presents these data as indexes on a base of the cost in Washington, D. C., as of that date as 100.

Table 7.—Estimated 1 Cost of Living for a 4-Person Manual Worker's Family at "Maintenance" Level, as Defined by the Works Progress Administration, in 31 Large Cities, as of June 15, 1939

City	Total	Food	Clothing	Housing	Fuel and light	Furniture, furnish- ings, household equipment	Miscel- laneous
Atlanta	\$1, 317, 75	\$471.08	\$157.09	\$286.54	\$81.79	\$30, 43	\$290.
Baltimore		474. 12	165, 29	247, 71	98.46	35, 14	\$290. 301.
Birmingham		452.66	168, 93	225, 75	69. 19	32.88	
Boston		467. 79	167. 38	259. 77	128, 40	32.83	307. 347.
Buffalo		443. 67	168, 25	240.06	105. 02	32. 22	288
Chicago		450. 56	158. 74	291. 20	127. 48	31.48	366
Cincinnati		431, 81	173. 95	270. 11	91. 98	35, 34	308
Cleveland		439, 72	174, 10	283, 68	112.04	32.76	336
Denver		449. 36	161, 27	237. 45	113. 70	32.77	301
Detroit	1, 405, 22	437, 98	168. 60	307. 14	112.31	32. 35	346
Houston		442.08	156. 87	246, 20	84. 77	34, 90	327
Indianapolis		431, 97	156, 65	238, 34	91, 68	32, 51	314
Jacksonville		476, 11	146, 67	217. 97	99, 55	32. 46	311
Kansas City	1, 257. 92	453, 93	170. 54	209. 58	101, 98	33. 35	288
Los Angeles	1, 315, 06	427, 27	167. 26	246, 01	74, 73	34, 91	364
Memphis.		429, 65	170. 86	260. 68	82, 10	35, 51	308
Minneapolis	1, 397, 66	463, 79	159, 27	304. 55	136. 36	32. 24	301
Mobile		463, 76	154. 17	175. 03	77, 98	34. 02	273
New Orleans	1, 257. 11	453, 29	159. 81	205, 16	74, 42	36, 71	327
New York	1, 471, 45	492, 44	163. 69	309. 21	115. 18	34, 40	356
Norfolk		470, 52	166. 25	245, 55	95, 65	33, 19	303
Philadelphia		470. 52	166. 27	255, 14	98. 28	32.74	302
Pittsburgh	1, 346, 95	454. 94	166. 10	285, 57	88. 07	33.77	318
Portland, Maine		488. 19	162. 14	200. 51	139. 33	32.61	309
Portland, Oreg		470, 35	157. 27	191. 34	135, 89	33. 90	331
Richmond	1, 318. 12	440, 61	164.89	251. 81	102. 11	34. 53	324
St. Louis		451. 52	160. 01	284. 39	103. 75	37. 25	319
San Francisco	1, 441. 98	473, 27	170. 58	285, 08	86, 67	37.06	38
Beranton		463, 41	160. 45	266, 50	92. 38	31.37	32
Seattle		476, 80	169, 72	196, 03	126. 16	35, 23	360
Washington, D. C		476, 89	170, 19	351, 86	112.42	35, 82	330

See explanation of method given on pp. 1165 and 1166.
 See the Works Progress Administration publication "Intercity differences in costs of living in March 1935, 59 cities," Research Monograph XII, for the items included in the "maintenance" budget.

TABLE 8.—Estimated <sup>1</sup> Indexes of Cost of Living for a 4-Person Manual Worker's Family at "Maintenance" Level, as Defined by the Works Progress Administration <sup>2</sup>

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303, 14 302, 10 318, 50

309. 13 331, 12 324, 17

319.82 389.32

360.14

330.87

n March

[Washington costs as of June 15, 1939=100]

City	Total	Food	Clothing	Housing	Fuel and light	Furniture, furnish- ings, household equipment	Miscel- laneous
Atlanta	89. 2	98.8	92. 3	81.4	72.8	85. 0	87. 9
Baltimore	89. 5	99. 4	97.1	70.4	87.6	98.1	91. 2
Birmingham	85. 1	94.9	99.3	64. 2	61.5	91.8	93. 1
Boston	95. 0	98. 1	98. 3	73.8	114. 2	91.7	105. 0
Buffalo	86. 4	93. 0	98. 9	68. 2	93. 4	89.9	87.1
Chicago	96. 5	94. 5	93. 3	82.8	113. 4	87.9	110. 7
Cincinnati.	88. 7	90. 5	102. 2	76. 8	81.8	98.7	93. 1
Cleveland	93. 3	92. 2	102. 3	80.6	99.7	91.5	101.6
Denver	87.7	94. 2	94.8	67. 5	101. 1	91.5	91. 3
Detroit	95. 1	91.8	99. 1	87. 3	99.9	90.3	104. 8
Houston	87.4	92.7	92. 2	70.0	75. 4	97.4	98. 9
Indianapolis	85. 6	90.6	92. 0	67. 7	81.6	90.8	95, 1
Tockson ville	86. 9	99.8	86. 2	61.9	88. 6	90.6	94.
Kansas City	85. 1	95. 2	100. 2	59. 6	90.7	93. 1	87. 2
Los Angeles	89. 0	89. 6	98. 3	69. 9	66. 5	97.5	110. 2
Memphis	87. 1	90.1	100.4	74. 1	73. 0	99. 1	93.
Minneapolis	94.6	97.3	93. 6	86. 6	121. 3	90.0	91.
Mobile	79. 7	97. 2	90. 6	49.7	69. 4	95. 0	82.
New Orleans	85. 1	95. 1	93. 9	58. 3	66. 2	102. 5	99.
New York	99. 6	103. 3	96. 2	87. 9	102, 5	96. 0	107.
Norfolk	88. 9	98. 7	97.7	69.8	85. 1	92.7	91.
Philadelphia	89. 6	98. 7	97.7	72.5	87.4	91.4	91.
Pittsburgh	91. 1	95. 4	97.6	81. 2	78. 3	94.3	96.
Portland, Maine	90. 1	102. 4	95. 3	57. 0	123.9	91.0	93.
Portland, Oreg	89. 3	98. 6	92. 4	54. 4	120.9	94.6	100.
Richmond	89. 2	92. 4	96. 9	71. 6	90.8	96. 4	98.
St. Louis	91.8	94. 7	94. 0	80.8	92. 3	104. 0	96.
San Francisco	97.6	99. 2	100. 2	81.0	77.1	103. 5	117.
Scranton	90.7	97. 2	94. 3	75. 7	82. 2	87. 6	98.
Seattle	92. 3	100.0	99.7	55. 7	112. 2	98. 4	108.
Washington, D. C	100.0	100.0	100.0	100. 0	100.0	100.0	100.

<sup>1</sup> See explanation of method given on pp. 1165 and 1166. <sup>2</sup> See the Works Progress Administration publication "Intercity differences in costs of living in March 1935, 59 cities," Research Monograph XII, for the items included in the "maintenance" budget.

### COST OF LIVING IN FOREIGN COUNTRIES 1

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THE principal index numbers of the cost of living (official and unofficial) published in the different countries are given in the following table. A brief discussion of these indexes has been presented in earlier issues of this pamphlet.

<sup>&</sup>lt;sup>1</sup> Table from International Labor Review, Geneva, July 1939, pp. 121-124.

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TABLE 9.—Indexes of Cost of Living for Specified Periods for the United States and Certain Foreign Countries 1

[Series recalculated by International Labor Office on base 1929=100;  $^{2}$  a=food; b=heating and lighting; c=clothing; d=rent; e=miscellaneous]

Country	Argen- tina	Aus- tralia	Austria	Bel- gium	Bra- zil	Bul- garia	Bur- ma	Can- ada	Chile		China	_
Fowns and localities	Bue- nos Aires	30	Vienna	59	Rio de Ja- neiro	12-67	Ran- goon	60	San- tiago	Peip-ing	Shang- hai	Tien- tsin
Original base (=100)	Oct. 1933	1923- 27	July 1914	1921	1928- 29	1914	1931	1926	Mar. 1928	1927	1926	1926
Composition of index	а-е	a-e	а-е	a-e	а-е	а-е	a-e	а-е	а-е	а-е	а-е	a-d
1930	101 87 78 83 78 83 91 93 92	95 85 81 78 80 81 83 85 87	100 96 97 95 95 95 95 95 95	104 93 84 83 79 80 85 92 94	91 88 88 87 94 99 114	92 80 73 68 64 60 57 58 60	(3) 100 98 90 87 89 88 89 88	99 90 81 78 79 79 81 83 84	99 98 104 130 130 132 144 162 169	103 90 86 76 75 81 94	113 117 110 99 98 99 105 122 139	103 98 91 80 78 86 98
1938—Mar	92 94 91 92 \$ 91	4 86 4 87 4 88 4 88 4 89	94 94 93 92	94 94 94 95 93 91		60 60 61 61 61 61	88 87 87 85 85 83 7 86	84 84 84 84 83 83	165 171 171 168 • 161		143 134	
Country	Co- lom- bia	Costa Rica	Czecho- slo- vakia	Dan- zig	Den- mark	Egypt	Esto- nia	Fin- land	Fr	ance	Ger- many	Great Brit- ain and N. Ire- land
Towns and localities	Bo- gota	San Jose	Prague	Dan- zig	100	Cairo	Tal- linn	36	Paris	45	72	24-50
Original base (=100)	Feb. 1937	1936	July 1914	July 1913	1931	Jan. 1913- July 1914	1913	1935	1914	1930	1913- 1914	July 1914
Composition of index	а-е	a-e	а-е	а-е	а-е	а, с-е	а-е	a-e	a-e	а-е	а-е	a-e
1930	(3) (3) (3) (3) (3) (3) (3) (3) 100 113	(3) (3) (3) (3) (3) (3) 100 106 107	98 93 92 91 90 92 93 94 99	95 88 80 77 76 85 93 97 97	96 90 90 92 96 99 101 104 106	98 91 87 83 84 86 86 85	89 86 80 75 74 75 84 89 94	(3) (3) (3) (3) (3) 100 100 105 108	105 102 95 94 93 87 91 111 126	100 97 91 87 83 78 86 102 117	88 78 77 79 80 81 81	
1938—Mar June Sept Dec 1939—Mar June	110 122 110 114 126	108 107 107 108 107 6 108	97 98 99 102 104 • 106	97 97 98 97 98 • 98	107 105 106 106 106	86 87 86 87 85 6 86	95 94 93 93 94 6 94	10 107 10 106 10 109 10 109 10 109	4 124 4 124 4 124 4 130	4 115 4 116 4 117 4 120 4 122	82 82 81	

See footnotes at end of table,

TABLE 9.—Indexes of Cost of Living for Specified Periods for the United States and Certain Foreign Countries—Continued

Country	Greece	Hun- gary	Inc	lia	Indo		1	Ire- land	Italy		Japan		Lat- via
Towns and localities	44	Buda- pest	Bom- bay	Ah- med- abad	Saigo	n 7		105	50	24	13	Tokyo	Riga
Original base (=100)	Dec. 1914	1913	July 1933- June 1934	Aug. 1926- July 1927	1925	Mar 21, 1936 Mar 20, 1937		July 1914	June 1928	July 1937	July 1914	July 1914	1930
Composition of index	а-е	a-d	а-е	а-е	a, d,	e a-e		а-е	а-е	а-е	a-e	а-с, е	a-e
1930	116 117 121	91 86 83 77 76 78 82 87 88	(3) (3) (3) 100 11 99 100 101 106 106	90 77 78 74 73 73 73 78 78	8	3 (3) 11 (3) 5 (3) 9 (3) 9 (3) 9 (3)	00	97 91 89 86 87 89 91 97 98	97 87 83 80 76 77 83 91 98	(3) (3) (3) (3) (3) (3) (3) (3) (100 110	(3) 98 100 103 106 110 113 118 126	86 75 75 80 82 84 88 96 110	100 91 79 76 72 73 73 79 87
1938—Mar June Sept Dec 1939—Mar June	128 130 130 129	88 87 88 87 86 86	107 105 105 104 103 6 103	73 73 73 74 70	49	13 13 16 13 17 13	30 30 33	4 98 4 97 4 98 4 100 4 99 4 98	98 98 97 99 99 4 100	107 109 113 113 115 6 116	124 126 129 129 129 8 130	106 109 113 117 \$ 118	81 93 87 86 86 7 89
Country	Lithu- ania	Lux- embur	Net erlan		Vetherl Indi		Ze	New aland	Nor- way	Pales- tine	Peru	Po- land	Por• tugal
Towns and localities	104	9	Amst	er- a	ava nd dura	Bata- via		4-25	31	3	Lima	War- saw	Whole country
Original base (=100)	1913	1914	Oct 192 Sep 192	t. 1	913	Jan. 1929	1	926-30	July 1914	Jan. 1922	1913	1928	June 1914
Composition of index	а-е	a-c, e	a	e a,	b, e	a-e		а-е	a-e	a, b, e	a, c-e	а-е	a, b, e
1930 1931 1932 1933 1934 1935 1935 1936 1937	71 61 57	777777777777777777777777777777777777777	1 9 9 6 4	96 90 84 83 83 81 79 82 83	97 65 48 39 39 41 38 44 44	11 62 11 52 11 49 52 53		98 90 84 79 81 83 86 92 95	97 92 90 89 89 91 93 100	89 80 82 79 80 79 84 88	96 90 86 83 84 86 90 96	82 74 67 62 63 60 63 63 64 65	84 86 89
June Sept Dec 1939—Mar June	57 57 57 58 58	7 8 7 8 8 8	1 2 1 1 2 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1	82 84 83 82 82	46 44 43 43 42	53 52 53 53 53 6 53		94 95 95 96 96 97	103 104 102 102 102 7103	86 83 85 86 83 6 82	99	9 60 6 60 5 60 5 60	86 83 83 80

See footnotes at end of table.

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TABLE 9.—Indexes of Cost of Living for Specified Periods for the United States and Certain Foreign Countries-Continued

Country	Pun- jab	Ru- mania	South- ern Rho- desia	Spain	Swe- den	Swit- zer- land	Tuni- sia	Tur- key	Union of South Africa	United States B. L. S.	Uru- guay	Yugo	oslavia
Towns and localities	La- hore	Buch- arest	6	Ma- drid	49	49	Tunis	Istan- bul	9	32-51	Monte- video		3 (Cro- atia and Sla- vonia)
Original base (=100)	1931- 1935	1933	1914	1914	July 1914	June 1914	July 1914	Jan June 1914	1914	1923-25	1929	1926	July 1914
Composi- tion of in- dex	а-е	а-с	a, b, d	a, b, e	а-е	а-е	а-е	a-e	а-е	a-e	а-е	a-c, e	а-е
1930	(3) (3) (3) (3) (3) (3) 100 115 128 109	(3) (3) (3) 100 96 98 102 112 124	100 96 92 87 86 85 85 88 89	103 107 103 100 102 99	97 94 • 92 91 91 92 93 95 98	98 93 86 81 80 80 81 85 85	100 96 83 76 74 69 79 96 111	92 87 85 76 75 69 70 71 70	98 94 90 87 89 88 88 91 94	98 89 80 76 79 81 82 85 83	100 100 99 93 93 96 96 96 98	92 87 81 79 75 74 74 78 87	92 85 77 66 61 61 61
1938—Mar June Sept Dec 1939—Mar June	108 104 108 122 3 118	124 126 123 126 126 126	89 90 88 89 89		97 98 98 98 99	85 85 85 85 84 7 85	4 108 4 112 4 116 4 114	72 70 70 70 70	94 94 93 94 100	83 84 83 83 82 82	95 99 100 99 100 6 104	84 88 87 89 88 6 88	60 77 60 77 60 60

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<sup>1</sup> Table from International Labor Review, Geneva, July 1939, pp. 121-124.
<sup>2</sup> Except for series in italics, which are on original base, or recalculated on nearest possible year to 1929.
<sup>3</sup> No indexes computed.
<sup>4</sup> Indexes computed as of February, May, August, and November.

• February.

Indexes computed as of February, May, August, and Nover February.
April.
May.
Territory before 1938.
New or revised series beginning this year.
Indexes computed as of January, April, July, and October.
Average calculated for a period of less than 1 year.
Corrected figure.

## Minimum Wages and Maximum Hours

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# WAGE DETERMINATIONS UNDER PUBLIC CONTRACTS ACT

THE Secretary of Labor determined the prevailing minimum wages to be paid workers engaged on Government contracts in the paper and pulp industry on September 26, and in the manufacture of small-arms ammunition, explosives, and related products industries on October 4, 1939, bringing the total number of determinations under the Walsh-Healey law to 30.<sup>1</sup> In addition, the definition of the men's raincoat industry was clarified on September 18, 1939, and that for the luggage and saddlery industry was extended, on September 26, 1939, to include carrier's tie straps and leather pouches. These determinations are summarized below.<sup>2</sup>

Paper and pulp.—For the purposes of the determination, the Secretary of Labor defined the paper and pulp industry as including the manufacture or furnishing of pulp and other fiber, and the primary conversion of pulp and other fiber into paper and paperboard, and in addition, the manufacture and conversion of primary paper into toilet paper and paper towels, coated book paper, and paper shipping sacks.

Effective October 15, 1939, the wages in the industry for work on Government contracts subject to the jurisdiction of the Walsh-Healey Act were fixed at from 35 to 50 cents an hour, or \$14 to \$20 per week of 40 hours, arrived at on either a time or piece-work basis. In the States of Virginia, North Carolina, South Carolina, Georgia, Alabama, Tennessee, Kentucky, Mississippi, Louisiana, Arkansas, Oklahoma, Florida, and Texas, the hourly rate is 35 cents; for the States of Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Delaware, Maryland, West Virginia, Ohio, Indiana, Michigan, Wisconsin, Illinois, Missouri, Iowa, Minnesota, North Dakota, South Dakota, Nebraska, Kansas, New Mexico, Colorado, Wyoming, Montana, Idaho, Utah, Arizona, Nevada, and the District of Columbia, 39 cents; and in Washington, Oregon, and California, the prevailing minimum rate of pay was determined to be 50 cents an hour.

<sup>&</sup>lt;sup>1</sup> For earlier determinations see Monthly Labor Review, July and December 1938 and February, March, June, September, and October 1939.

<sup>&</sup>lt;sup>2</sup> U. S. Department of Labor. Division of Public Contracts. Press releases Nos. 914, 932, 935, and 946.

Small-arms ammunition, etc.—In the determination for the small-arms ammunition, explosives, and related products industries, which became effective on October 19, wages of from 42.5 to 57.5 cents an hour, or \$17 to \$23 a week of 40 hours, were established for different branches of manufacture. The 42.5-cent rate applies in the manufacture and supply of ammunition and parts thereof for small arms, and such related products as saluting primers and aircraft engine starters; for persons employed in the manufacture and supply of blasting and detonating caps, the applicable rate is 47.5 cents an hour; and for those employed in the manufacture and supply of explosives, including dynamite, permissible explosives (those approved by the United States Bureau of Mines for use in mines where dust and gas explosions are likely to occur), nitroglycerine, black blasting powder, pellet and fuse powder, and smokeless gun powder, it is 57.5 cents an hour.

Men's raincoats.—In the determination for the men's raincoat industry, dated July 28, 1937,<sup>3</sup> the word "Cravenette" appeared as a term of common usage. As "Cravenette" is a registered trade-mark and should have been so designated, the Secretary of Labor on September 18, 1939, changed the wording of the determination to provide that the 40-cent minimum wage already established should apply for work in the manufacture of men's raincoats, including vulcanized and rubberized raincoats and raincoats made from material known under the registered trade-mark of "Cravenette" or from fabric chemically or otherwise treated so as to render it water-resistant (except oiled cotton). Learners and handicapped and superannuated workers, not to exceed 10 percent of the employees in the establishment concerned, may be paid 25 cents an hour or \$10 a week, but not less than the piece rates paid to other workers in the same establishment.

Carrier's tie straps and leather pouches.—The luggage and saddlery industries determination of July 12, 1938,4 was extended by order of September 26, 1939, to cover the manufacture of carrier's tie straps and leather pouches (consisting of a leather pouch or pocket of holster type with belt loop used for carrying pliers and knife), effective October 11, 1939. Under the terms of this determination the hourly rate of pay on work to fulfill Government contracts is 40 cents an hour or \$16 a week, in the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey, Maryland, Delaware, Washington, Oregon, California, Idaho, Nevada, Arizona, Montana, Wyoming, Utah, Colorado, and New Mexico, and 37.5 cents an hour, or \$15 per week, in the other 26 States and the District of Columbia.

<sup>&</sup>lt;sup>2</sup> See Monthly Labor Review, July 1938 (p. 113).

<sup>4</sup> Iden, December 1938 (p. 1358).

## Wages and Hours of Labor

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# HOURLY EARNINGS IN KNIT-GOODS INDUSTRIES (OTHER THAN HOSIERY), SEPTEMBER 1938

By H. E. RILEY and JACOB PERLMAN, Bureau of Labor Statistics 1

### Summary

HOURLY earnings of workers in the knitted-underwear industry averaged 39.9 cents in August and September 1938, according to a report recently prepared by the Bureau of Labor Statistics. For the same period, average hourly earnings in the knitted-outerwear industry amounted to 45.8 cents, while the average for the knitted-cloth industry was 56.0 cents. The earnings of employees inglove-knitting establishments averaged 40.9 cents per hour.

The survey revealed that three-fourths of the employees in the knitted-underwear industry were women, who averaged 36.8 cents an hour, as against 48.9 cents for men. In the knitted-outerwear establishments, also, women constituted three-fourths of the working force. The average hourly earnings of all male employees was 62.2 cents, as against only 39.8 cents for females. In the knitted-cloth industry, on the other hand, three-fourths of the workers were males, who averaged 60.1 cents an hour. The hourly earnings for females in these plants averaged 41.8 cents. Nearly four-fifths of the workers in the knitted-glove plants were women. The hourly earnings of women averaged 31.5 cents, which was 24.0 cents less than the average (58.5 cents) for male employees.

## Scope of Survey

Recently the Bureau of Labor Statistics made a survey of earnings and hours in the knit-goods industries, which included establishments manufacturing the following products: Hosiery (full-fashioned and seamless), knitted underwear, knitted outerwear, knitted cloth, and knitted gloves and mittens. A common characteristic of these industries is that all of their establishments employ knitting machines in the manufacturing operations. The yarns consumed are made of cotton, rayon, silk, wool, or other fibers, or of any mixture of fibers.

<sup>&</sup>lt;sup>1</sup> Edward B. Morris and George E. Votava assisted in the collection and tabulation of the data.

A report covering earnings and hours in the full-fashioned and seamless hosiery industries has already been published by the Bureau. The present report covers knitted underwear, outerwear, cloth, gloves and mittens. Although these four industries resemble each other in some respects, each is essentially a distinct entity, possessing special characteristics that necessitate a separate treatment of the data.

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While the manufacturing processes in knitted underwear and outer. wear mills are similar in a general way, it is found that there are significant differences between the two industries with respect to such characteristics as geographical location, size of establishment, and composition of the labor force. These variations arise from differences in their products.

The outstanding feature of the knitted-cloth industry lies in the fact that it includes only the first step in a process that is carried to completion in another industry. The knitted-underwear and the knitted-outerwear mills both knit the fabrics and make them up into garments. The knitted-cloth mills, however, knit flat or tubular fabrics for sale to cutting and sewing establishments, which have no knitting equipment. The cloth-knitting mills produce fabrics for outerwear, underwear, and gloves and mittens.

The production of knitted gloves and mittens requires a certain amount of specialized equipment, and is influenced by different factors of style and seasonal demand from those affecting the other knitgoods industries.

Although the Bureau's classification of the knit-goods industries conforms to that used by the Census of Manufactures, the treatment of individual plants by the two organizations differs in one important respect. In case an establishment makes products belonging to two or more industries, the Census of Manufactures classifies the entire employment of the plant in accordance with the product representing over 50 percent of the total value of its output. The Bureau practice, however, is to allocate the employment covering each product, if possible, to the proper industry. This difference in procedure is very important in connection with the knit-goods industries, in view of the fact that a number of the large establishments covered by the survey manufacture products that come within the scope of more than one of the industries composing the knit-goods group. In every instance, moreover, where the secondary products constituted a significant proportion of the plant's output, it was found that each product was made in a special department. These departments, therefore, have been scheduled separately, and the data classified under the proper industry.3

<sup>&</sup>lt;sup>1</sup> See Bureau of Labor Statistics Serial No. R. 955, Earnings and Hours in the Hosiery Industry, 1938, which has been reprinted from articles covering the full-fashioned and seamless hosiery industries that appeared, respectively, in the May and June 1939 issues of the Monthly Labor Review.

<sup>&</sup>lt;sup>3</sup> In each of these establishments, the indirect or nonproductive workers were allocated to the various departments in accordance with the proportion of direct workers employed.

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Another difference between the Bureau's survey and the Census of Manufactures lies in the fact that the former excluded from each of the knit-goods industries the yarn departments in integrated plants. The Census of Manufactures, however, includes wage earners in these departments in the total coverage for each industry. It should also be pointed out that the Bureau excluded from its survey any departments making garments of woven fabrics. By contrast, such departments were covered by the Census of Manufactures, provided their output represented less than 50 percent of the plant's total value of product.

Because of these differences in procedure, it is impossible to make a comparison of the coverage in the Bureau's survey with that of the Census of Manufactures.

## Nature of Data Collected

The survey of the knit-goods industries was conducted in the early fall of 1938. The information was collected by field representatives of the Bureau, who called upon the various establishments and copied data from pay-roll records, which were supplemented by information secured through interviews with plant officials.

The survey was made on the basis of a representative sample, which was selected with great care to assure adequate coverage with respect to all significant characteristics of the various branches, including geographical distribution, size of establishment,<sup>5</sup> size of community, product, corporate affiliation, and unionization.

In the knitted outerwear, cloth, and glove and mitten industries, the survey included all wage earners in each plant covered, with the exception of higher supervisory and central office employees and workers in departments not falling within the scope of the survey. In the survey of knitted underwear, however, it was necessary to take a sample of the wage earners in most of the larger mills. This was done in order to avoid overweighting the industry sample with employees of large establishments, as well as to secure an adequate geographical representation. The sample in each of these mills was selected by taking a proportionate number of workers from each sex and occupational group.

For each individual, the Bureau obtained the occupation, sex, color,<sup>6</sup> method of wage payment, number of hours actually worked, and total earnings during one pay-roll period.<sup>7</sup> Descriptions of occupations and estimates of the degree of skill required were secured from the

<sup>&#</sup>x27;The manufacture of yarn is usually included by the Bureau in surveys of the cotton, silk and rayon, and woolen and worsted industries.

 $<sup>^{1}\,\</sup>mathrm{N}_{0}$  establishment with less than 10 wage earners was included in the survey.

There was not a sufficient number of colored workers to justify separate tabulation.

<sup>&</sup>lt;sup>7</sup> In case the pay-roll period exceeded 1 week, the Bureau also obtained the number of hours worked during 1 continuous week within the pay-roll period.

plant supervisors. This information was used as a basis for determining the occupational groupings used in this report, including the classification of occupations as to degree of skill. The data collected also included annual earnings for the calendar year 1937, wherever available, for employees who were on the plant's pay roll at the time of the survey.8

For most of the plants in the survey, the information covered a pay-roll period in August or September 1938. The monthly indexes of employment in knit-goods mills, as compiled by the Bureau's Division of Employment Statistics, indicate that the general level of activity during that period was fairly normal as compared with the year as a whole. As the data cover a pay-roll period prior to October 24, 1938, it should be borne in mind that the earnings under 25 cents shown in the report have been largely readjusted in compliance with the Fair Labor Standards Act, which became effective on that date.

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The hourly earnings computed in this survey include in some instances both regular wages and extra earnings due to overtime rates of pay. However, the number of employees who received higher rates of pay for overtime work was insignificant. For all practical purposes, therefore, it may be assumed that the hourly earnings shown in this report are based on regular wage rates.

The establishments covered by the survey have been classified according to size of plant, size of community, and unionization.

The size of each establishment was determined by its total employment, including not only the wage earners scheduled but also the workers in departments not falling within the scope of the survey. Some companies have two or more separate but closely coordinated plants located within one community, in which case the employment in all plants combined was used.

The method of determining size of community or metropolitan area is similar to that employed by the Bureau of the Census. For places having populations of 100,000 or more, the census areas were used. The size of the smaller communities was determined by counting, not only the population of the principal city, but also that of adjacent areas which appeared to form part of the same homogeneous urban locality.

Only those establishments having agreements with national or international labor organizations have been classed as union plants. In most instances, the union contract covered virtually all of the employees in the plant.

The annual earnings data will be presented in a subsequent report.

#### PART 1.-KNITTED UNDERWEAR

## Description of Industry

#### SIZE OF INDUSTRY

Based on the definition of the Census of Manufactures, the knitted-underwear industry included 179 establishments in 1937, with 39,923 wage earners (average for the year). The census covers only plants having an annual product valued at \$5,000 or more.

The 1937 output of the industry, including receipts for contract work, was valued at \$117,766,627 at the factory, while the value added by manufacture amounted to \$54,347,574. The wage bill totaled \$28,560,353, which was 52.6 percent of the value added by manufacture and 24.3 percent of the total value of product.

According to the Census of Manufactures, over one-half of the output of the industry, as measured by value of product, consists of underwear for mer, youths, and boys. Garments for women, misses, children, and infants make up a substantial proportion of the product value, but the output also includes a small amount of miscellaneous products, most of which are not identified by the census. Cotton is the most important fiber consumed by the industry, being used alone or in combination with wool and rayon or other fibers for the bulk of the products.

#### ANALYSIS OF SAMPLE

The coverage of the survey includes 61 establishments and 12,545 wage earners. An analysis of the sample shows that the knitted-underwear industry is widely distributed geographically. Very little production is found west of the Mississippi River, however, except in the State of Minnesota. New York is the leading State, including 32.3 percent of the workers covered by the survey. Pennsylvania ranks second in importance, with 17.4 percent of the wage earners. A substantial proportion of the industry is located in the Southern States, 23.9 percent of the employees being found in that region.

In common with other textile industries, underwear manufacturing has been shifting into the Southern States in recent years. Although Tennessee and North Carolina are the leading States in that area, some mills are also found in other Southern States.

The knitted-underwear industry contains relatively few very small plants. Of the 61 establishments included in the survey, 17 with 6.1 percent of the workers scheduled had under 100 employees, 13 with 14.4 percent of the wage earners had 101 to 250, 21 with 47.6 percent of the workers had 251 to 500, and 10 with 31.9 percent of the wage earners had over 500 employees.

Relatively few plants in the industry were found in the largest metropolitan areas. Of the 49 establishments covered in the Northern

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States, 11 plants, with 20.1 percent of the employees scheduled in the territory, were located in metropolitan centers having a population skille of about 750,000 and over. The remainder of the coverage was divided between communities of 100,000 to 500,000 and those of less were than 60,000, the former accounting for 17 establishments with 413 occur percent and the latter for 21 plants with 38.6 percent of the total the t wage earners. By contrast, the southern sample showed 6 establish about ments, with 56.2 percent of the workers scheduled in that area located in places of 75,000 to 175,000, while 6 plants, with 43.8 percent of the wage earners, were found in communities of under 25,000

Although the practice of collective bargaining between employers and employees was found in only 6 of the 61 establishments included the number of workers affected amounted to about one-sixth of the total scheduled. All of the union plants in the sample were located The agreements in the 6 plants were with seven in Northern States.

labor organizations.

A considerable degree of specialization exists in the industry with wer respect to the types of underwear produced by various plants. Thus, piece 19 establishments, with 41.8 percent of the workers scheduled, were making garments for men or for men and boys only, and 15 plants, with 19.5 percent, made underwear for women or for women and chil. gro dren only. In addition, 8 establishments, with 8.4 percent of the wage earners, were making various types of underwear for infants and children. Several of the latter mills produced specialty garments. Of the remaining plants, 8 made underwear for men, women, and children, 8 for men and women, and 3 for men and children.

#### COMPOSITION OF LABOR FORCE

Most of the knitted underwear produced in the United States is made by first knitting a flat or tubular cloth, which is then marked according to a pattern and cut up into the garment parts. The parts are assembled, hemmed, and trimmed to form the completed article. These are largely sewing-machine operations.

In the opinion of a majority of the supervisors, the sewing-machine operations in underwear manufacture are principally semiskilled in This is in contrast to the knitted-outerwear industry, where the sewing-machine operators were placed in the skilled category. Due to the fact that stitching contributes much to the appearance of the garment, it is a more exacting operation in outerwear than in

underwear.

As women are usually employed for sewing-machine operations, they constitute a large majority of the workers in the knitted-underwear mills. According to the sample, over three-fourths (76.9 percent) of the wage earners in the industry were women.

Four-fifths (80.3 percent) of the employees were classed as semipulation skilled, one-eighth (11.9 percent) as skilled, and only 7.8 percent as Tage Was unskilled. Over four-fifths (86.5 percent) of the semiskilled workers se of less were women. On the other hand, males predominated in the skilled with 411 occupations, amounting to more than two-thirds (69.6 percent) of the total in this group. The proportions of males and females were stablish shout equal among the unskilled workers.

## Average Hourly Earnings

#### METHODS OF WAGE PAYMENT

ncluded, A large majority of the workers in the knitted-underwear industry n of the are paid on a straight piece-rate basis. Of the 61 plants covered by the survey, 56 employed this method for at least part of their wage several garners. Production-bonus systems were in effect for some employees in only 9 mills. Of the 12,545 workers included, 3,139 (25.0 percent) were paid on a time basis, 6,750 (53.8 percent) received straight piece rates, and 2,656 (21.2 percent) were subject to productiond, were bonus systems.

Considerable variation was found among the several sex and skill groups with respect to methods of wage payment. A majority of nd chil. the male employees in each skill were paid on a time basis, the proportions being 62.7 percent for skilled, 64.0 percent for semiskilled, and 87.3 percent for unskilled. Among the females, on the other hand, a majority in each case were paid on either a straight piecerate or production-bonus basis, the respective percentages being 57.4, 91.2, and 54.4.

Few establishments followed a policy of paying extra rates for overtime work. In the northern region, 6 plants paid time and onehalf for time worked beyond 8 hours a day or 40 hours a week. two instances, however, the payment of an extra rate was made only to the hourly employees. Only 2 of the southern mills paid extra overtime rates. One paid time and one-half after 8 hours daily or 48 hours weekly, and one paid time and one-half to hourly employees only for work beyond 55 hours a week.

In 10 establishments, workers on extra shifts received higher rates than those employed on regular day-time operation.9 One plant allowed a differential of 10 percent over the base rate for the second and 50 percent for the third shift. In two mills, only the employees on the third shift received extra pay, the rates being 5 percent higher in one and 25 percent higher in the other instance. Two plants granted a 10 percent differential to workers on extra shifts, while

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There were 21 additional plants with extra-shift operation that did not pay higher rates to the workers on the extra shifts.

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one allowed only 5 percent additional pay. In one establishment the helpers received 7½ cents an hour more on the night than on the day shift. In contrast, the night-shift foremen in this plant received 5 cents an hour less than the day foremen, presumably because the night foremen had fewer employees to supervise. Of the remaining 3 mills paying extra rates, one paid 9½ cents an hour extra for work on the second and third shifts, one allowed knitters 41/2 cents and fixers 4 cents an hour more on the second shift, and one paid about 3 cents an hour extra to the second-shift workers.

These additional payments for extra-shift operation had virtually no effect on the averages, however, as the number of employees affected amounted to less than 1 percent of the total scheduled.

#### HOURLY EARNINGS OF ALL WORKERS

According to table 1, the hourly earnings of all workers covered by the survey of the knitted-underwear industry averaged 39.9 cents in August and September 1938. The distribution in table 2 reveals. however, that this average covers a wide range of individual earnings. extending from under 17.5 cents to over \$1.20 an hour.

Table 1.—Average Hourly Earnings in Knitted-Underwear Industry, by Wage Area, Skill, and Sex. August and September 1938

Wagaana	Al	l worke	ers	Skill	ed wor	kers		miskill vorkers			rskille vorkers	
Wage area	Total	Male	Fe- male	Total	Male	Fe- male	Total	Male	Fe- male	Total	Male	Fe- male
,					Avera	ge hou	rly ear	nings				
United States	\$0.399	\$0.489	\$0.368	\$0.549	\$0.603	\$0.417	\$0.383	\$0.449	\$0.371	<b>\$0.</b> 320	\$0.366	\$0.26
Northern wage area	. 422	. 528	. 386	. 581	. 642	. 437	. 404	. 488	. 390	. 337	. 395	. 274
New England States <sup>1</sup> and New York <sup>2</sup> Pennsylvania Middle Western	. 423		. 383			. 431 . 396	. 402 . 372		. 384		. 378	
States3	. 475	. 582	. 442	. 613	. 723	. 470	. 454	. 523	. 442	. 430	. 467	. 348
Southern wage area 4	. 330	. 381	. 309	. 445	. 481	. 327	. 319	. 350	. 313	. 271	. 293	. 20
					Nu	mber o	of work	ers				
United States	12, 545	2, 902	9, 643	1, 499	1,043	456	10, 067	1, 356	8, 711	979	503	470
Northern wage area	9, 548	2, 141	7, 407	1, 160	789	371	7, 655	990	6, 665	733	362	37
New England States <sup>1</sup> and New York <sup>2</sup> Pennsylvania Middle Western	5, 403 2, 182		4, 026 1, 830				4, 334 1, 737					
States <sup>3</sup>	1, 963	412	1, 551	259	143	116	1, 584	189	1, 395	120	80	) 4
Southern wage area	2, 997	761	2, 236	339	254	85	2, 412	366	2,046	246	14	1 10

<sup>1</sup> Includes Connecticut, Massachusetts, Rhode Island, and Vermont-

Includes New Jersey.

Includes New Jersey.

Includes Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

Includes Alabama, Georgia, North Carolina, Tennessee, and Virginia.

The distribution for all workers shows a well-defined central tendency. In terms of 5-cent class intervals, the greatest concentration (22.0 percent) occurs between 35 and 40 cents an hour. Over two-fifths (42.4 percent) of the workers averaged 40 cents or more, but only 7.7 percent received as much as 57.5 cents or more. On the other hand, over one-third (35.6 percent) averaged under 35 cents, 6.7 percent receiving less than 25 cents.

Table 2.—Percentage Distribution of Workers in Knitted-Underwear Industry in the United States, by Average Hourly Earnings, Skill, and Sex, August and September 1938

Average hourly earnings	All	l worke	ers	Skill	ed wor	kers		miskill vorkers			nskille workers	
(in cents)	Total	Male	Fe- male	Total	Male	Fe- male	Total	Male	Fe- male	Total	Male	Fe- male
Under 17. 5	1. 2 2. 3 2. 4 5. 8 9. 2 7. 5 12. 2 9. 8 8. 6 12. 8 8. 5 4. 8 2. 4 1. 0 . 8	0.8 .2 1.0 .7 2.2 1.9 6.5 4.9 8.6 6.2 8.8 12.5 10.5 9.8 5.8 5.8 5.3 7 3.3	0.8 1.5 2.7 2.9 6.3 8.2 10.0 8.3 11.0 8.6 13.1 7.9 3.3 1.3	0. 3 . 1 . 7 . 4 1. 4 1. 4 2 1 4. 0 5. 6 7. 4 7. 9 12. 0 10. 6 9. 8 7. 1 7. 2 4. 9	0. 3 . 1 . 4 . 1 . 5 . 6 1. 2 2. 4 3. 3 3. 0 6. 7 10. 9 9. 9 11. 9 8. 2 9. 9 6. 8	0. 2 1. 3 1. 1 3. 5 3. 3 4. 4 7. 7 11. 0 17. 5 10. 5 14. 8 12. 5 5. 0 4. 4 1. 1 . 9	0.7 .9 1.9 2.5 5.3 7.7 10.0 8.0 13.0 10.3 9.0 13.8 8.6 4.3 1.8	1. 0 . 1 . 6 . 7 2. 0 2. 1 8. 3 5. 6 9. 7 6. 7 9. 9 15. 4 11. 8 10. 6 5. 4 3. 2 2. 2 1. 8	0.7 1.0 2.1 2.8 5.8 8.5 10.3 8.5 10.9 8.9 13.5 10.9 8.9 13.5 1.3 4 1.3 5	2. 8 6. 3 9. 4 4. 3 12. 5 5. 7 11. 4 7. 2 13. 3 8. 0 6. 0 5. 6 4. 5 1. 5 8. 4 3	1. 4 . 6 3. 4 1. 8 6. 4 3. 8 12. 9 8. 2 16. 5 11. 7 10. 1 8. 9 8. 5 3. 0 1. 6 . 6	4. 2 12. 4 15. 8 6. 9 18. 8 7. 8 9. 9 6. 1 9. 9 9. 4. 0 1. 7 2. 1
77. 5 and under 82. 5 82. 5 and under 87. 5 87. 5 and under 92. 5 92. 5 and under 100. 0 100. 0 and under 110. 0 110. 0 and under 120. 0 120. 0 and over	.3 .4 .2 .2 .2	2.0 1.2 1.7 .6 .8 .6 .5	(1) (1) (1) (1)	2.8 2.1 2.9 1.1 1.5 1.2 .9	3. 9 2. 9 4. 1 1. 6 2. 1 1. 7 1. 3	.2	(1)	1.3	(1) (1) (1) (1) (1)			
Total	100.0	100 0.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	12, 545	2,902	9, 643	1, 499	1,043	456	10,067	1.356	8, 711	979	503	476

<sup>1</sup> Less than a tenth of 1 percent.

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#### REGIONAL DIFFERENCES

In view of the wide geographical dispersion of the industry, any generalizations with respect to regional differences in hourly earnings can be made for the most part only on the basis of broad areas. An examination of the distribution of plant averages, as shown in table 3, reveals a pronounced difference in wage levels between the Northern and Southern States. For example, 6 of the 12 southern establishments had averages under 32.5 cents an hour, whereas only 1 of the plants in the northern region averaged less than that figure. On the other hand, 37 of the 49 northern establishments, as against only 1 plant in the southern area, averaged 37.5 cents or more.

This conclusion is confirmed by the data covering the average hourly earnings of individual employees. The average for all workers

in the Northern States was 42.2 cents an hour, which may be compared with 33.0 cents in the southern region.

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42.5 47.5 52.5 62.6 67.7 72.1 77.8 82.9 92.1 100 110

> Uri 17. 20. 22. 25. 37. 40. 42. 47. 52. 57. 62. 87. 92. 10.

Table 3.—Distribution of Plants in Knitted-Underwear Industry According to Average Hourly Earnings, by Wage Area, August and September 1938

			Nort	hern wage	area		
Average hourly earnings	United States	Total	New England States	New York 1	Penn- syl- vania	Middle Western States	Southern Wage area
Under 25.0 cents	1						
25.0 and under 27.5 cents	1						1
27.5 and under 30.0 cents	3	1			1		1 2
30.0 and under 32.5 cents	2						2
32.5 and under 35.0 cents	8	5		2	3		
35.0 and under 37.5 cents	8	6		1	5		9
37.5 and under 40.0 cents	11	11	3	4	3	1	*
10.0 and under 42.5 cents	6	5	1	2	2	******	
42.5 and under 45.0 cents	9	9	2	2	2	3	
45.0 and under 47.5 cents	6	6	2	3		1	
17.5 and under 50.0 cents	4	4		1		3	********
50.0 cents and over	2	2	1		******	1	
Total	61	49	9	15	16	9	1

<sup>1</sup> Includes 1 plant in New Jersey.

A comparison of the distributions shows that seven-tenths (69.0 percent) of the workers in the southern establishments averaged under 35 cents an hour, while only one-fourth (25.1 percent) in the northern plants received less than that figure. By contrast, 15.1 percent of the northern wage earners, as compared with only 3.6 percent in the southern establishments, averaged as much as 52.5 cents and over. (See table 4.)

Substantially higher hourly earnings are found in the northern than in the southern wage region for every skill and sex group. Thus, males averaged 52.8 cents in the North, as compared with 38.1 cents in the South. The respective averages for females were 38.6 cents and 30.9 cents. The differences ranged from 16.1 cents for skilled males to 3.5 cents for unskilled females.

Differences in hourly earnings are also found within the northern wage area, although the variations are less pronounced than shown between the northern and southern wage regions as a whole. The distribution of plant averages indicates that the general level of wages is lower in Pennsylvania than in the other Northern States, while that for the Middle Western States is the highest. The distributions for the New England States and New York occupy a middle position, with the bulk of the plant averages in each falling between 37.5 and 47.5 cents. In view of this fact, the data for these two areas have been combined for further analysis. 10

<sup>10</sup> The average hourly earnings of all workers in New York and the New England States are almost identical.

Table 4.—Percentage Distribution of Workers in Knitted-Underwear Industry According to Average Hourly Earnings, by Skill and Sex, August and September 1938

NORTHERN WAGE AREA

		N	ORTH	ERN	WAGE	ARE	A					
Average hourly earnings	Al	l work	ers	Skill	ed wor	kers	Semis	killed ers	work-	Unski	lle <b>d</b> wo	rkers
(in cents)	Total	Male	Fe- male	Total	Male	Fe- male	Total	Male	Fe- male	Total	Male	Fe- male
Under 17.5	0.3	(1)	0.4				0.4		0.4	0.4	0.3	0.5
17 5 and under 20.0	1.1	0.1	1.4				.7	0.1	.8	7.4	.3	14.3
00 0 and 11nder 22.5	1.7	. 4	2.1	0.1		0.3	1.2	.1	1.3	9.5	1.9	17.0
on 5 and under 25.0	1.8	. 5	2.2	. 3		.8	1.9	. 5	2.1	3.8	1.4	6.2
or a and under 27.5	3.6	1.0	4.3	.4	0.1	1.1	3.4	1.0	3.8	10.4	3.0	17.4
27.5 and under 30.0	4.3	1.1	5. 2 7. 3	.8	.3	1.9	4.7	1.3	5. 2	5.0	2.2	7.8
30.0 and under 32.5 32.5 and under 35.0	6.1	1.8	7.2	2.1	1.0	1.9	6.9	1.7	7.6	6.3	6 1	7.8
32.5 and under 37.5	13. 4	8. 2	15.0	5. 1	2.2	11.3	14.4	2.7 8.5	15. 4	16. 2	20. 5	6.7
35.0 and under 40.0	10. 9	5.8	12.3	7. 2	1.3	20. 0	11.5	6. 1	12.3	9.8	15. 0	4.9
40.0 and under 42.5	9.9	9.4	10.0	7.6	5. 3	12.4	10.4	11.2	10. 3	7.8	13.5	2.2
42 5 and under 47.5	15. 2	13. 4	15.8	11.2	8, 7	16, 4	16.5	18. 2	16.4	7.1	11.6	2. 7
47 5 and under 52.5	10.4	12. 2	9.9	10.7	8.7	14.8	10.8	15. 2	10.2	5.9	11.6	. 3
59 5 and under 57.5	5.8	11.8	4.1	11.2	13.8	6. 2	5.4	13. 1	4.2	2.0	4.1	
57 5 and under 62.5	2.9	7.1	1.7	8.2	9.6	5. 1	2.3	6.9	1.6	1.1	2.2	
62.5 and under 67.5	1.9	6.3	.7	8. 2	11.4	1.3	1.1	4.1	. 7	. 5	.8	.3
67.5 and under 72.5	1.3	4.8	.3	5. 5	7.6	1. 1	.7	3.9	. 2	. 4	.8	
72.5 and under 77.5	1.0	4.2	.1	5.9	8.4	. 5	. 4	2.4	.1			
77.5 and under 82.5	.6	2. 6 1. 5	(1)	3.4	4.8	.3	.3	1.8	(1)			
87.5 and under 92.5	.5	2.0	(1)	3. 2	4.7	. 0	.1	. 5	(1)			
92.5 and under 100.0		.8	(1)	1.4	2.0		(1)	.1	(1)			*****
100.0 and under 110.0	.2	.9	()	1.7	2.5		(-)		(.)			
110.0 and under 120.0	.2	.7	(1)	1.3	1.9		(1)		(1)			
120.0 and over	.1	.7		1.2	1.8							
Total	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100.0
Number of workers.		2, 141	7, 407	1, 160	789							
Number of workers	0, 040	2, 141	1, 101	1, 100	109	371	7, 655	990	6, 665	733	362	371
		s	OUTH	ERN	WAGE	ARE	A					
Under 17.5	2.5	2.9	2.3	1.2	1.2	1.2	1.9	3.6	1.6	9.8	4.3	17. 1
17.5 and under 20.0	1.5	. 5	1.8	.3	.4	2.2	1.5	.3	1.7	3.3	1.4	5. 7
20.0 and under 22.5	4.3	2.8	4.8	2.7	1.6	5.9	4.1	1.9	4.4	8.9	7.1	11.4
22.5 and under 25.0	4.2	1.3	5. 2	. 9	.4	2.4	4.6	1.4	5. 1	5.7	2.8	9.5
25.0 and under 27.5	11. 1	5. 5	13. 0	4.7	1.6	14.0	11.2	4.6	12.4	18.7	14.9	23.9
27.5 and under 30.0	14.7	4.1	18.4	3.5	1.6	9.4	17.0	4.4	19.3	7.7	7.8	7.6
30.0 and under 32.5	19.1	19.7	18.9	6.2	3.1	15. 2	20.0	25.9	19. 1	26.9	34. 1	17.1
32.5 and under 35.0	11.6 8.1	11. 2 9. 7	7.6	10.5	6.7	22.3	12.0	13.3	11.7	9.3	13.5	3.8
37.5 and under 40.0		7.5	5. 9	7.4 8.0	8.3	9.4	8.6	13. 1 8. 5	7.8	4.9	6.4	2.9
40.0 and under 42.5	4.7	7.0	3.9	8.7	10.9	2.4	4.5	6.3	4.2	.8	1.4	1.0
42.5 and under 47.5	5. 7	10.0	4.2	15. 1	17. 6	7.1	4.7	7.7	4.2	1.2	2.1	
47.5 and under 52.5	2.6	5.9	1.4	10.6	13. 4	2.4	1.7	2.7	1.5	.4	.7	
52.5 and under 57.5	1.3	3.9	. 5	4.8	6.3		1.1	3.8	. 5			
57.5 and under 62.5	. 6	2.0	.1	3. 2	3.9	1.2	.3	1.4	.1			*****
62.5 and under 67.5	. 6	2.1	.1	3.8	5. 1		.2	.8	.1			*****
67.5 and under 72.5	. 3	.8	.1	1.5	2.0		.1	. 3	.1			
72.5 and under 77.5	.2	.7	(1)	1.5	2.0		(1)		(1)	1-1		
77.5 and under 82.5	.1	1 -4		.9	1.2	*****			1	1		
82.5 and under 87.5	.1	.4		.9	1.2	*****		1	1		1	~~~~
87.5 and under 92.5 92.5 and under 100.0	(1)	.8	*****	1.8	2.4					1		
100.0 and under 110.0	.1	.3		.6	.4	*****						
110.0 and under 120.0	.1	.4		.9	1.2							
			100.0			100.0	100.0	100.0	100.0	100.0	100.0	100
Total	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0		100. 0	100. 0
Number of workers	2,997	761	2, 236	339	254	85	2, 412	366	2, 046	246	141	105

<sup>1</sup> Less than a tenth of 1 percent.

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The average hourly earnings of all workers in the New England States and New York amounted to 42.3 cents, which is 4.4 cents higher than the average (37.9 cents) for Pennsylvania and 5.2 cents

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lower than the average (47.5 cents) for the Middle Western States. The same order prevails for each of the skill and sex groups. Table 5 shows the distribution of workers in the various districts in the northern wage area according to average hourly earnings.

It is interesting to compare the average hourly earnings in Pennsylvania with those shown for the southern wage area. The average for all employees in Pennsylvania was 4.9 cents higher than that found in the southern wage region. Higher averages in the former over the latter are also found for each of the skill and sex groups, except for the small group of unskilled females, who averaged slightly more in the southern than in the Pennsylvania plants.

Among the factors that may be responsible for the geographical variations in hourly earnings are differences in unionization, size of community, product, and size of establishment. Due to the small coverage resulting from a further break-down of the data, however, no definite conclusions can be reached regarding the influence of these factors.

Table 5.—Percentage Distribution of Workers in Knitted-Underwear Industry in the Northern Wage Area, by Average Hourly Earnings and Sex, August and September 1938

	New England States and New York <sup>1</sup>			Per	Pennsylvania			Middle Western States		
Average hourly earnings	All work- ers	Males	Fe- males	All work- ers	Males	Fe- males	All work- ers	Males	Fe- males	
Under 17.5 cents.  17.5 and under 20.0 cents. 20.0 and under 22.5 cents. 22.5 and under 22.5 cents. 25.0 and under 27.5 cents. 27.5 and under 30.0 cents. 30.0 and under 32.5 cents. 32.5 and under 32.5 cents. 35.0 and under 37.5 cents. 37.5 and under 40.0 cents. 40.0 and under 47.5 cents. 42.5 and under 47.5 cents. 42.5 and under 47.5 cents. 42.5 and under 57.5 cents. 55.5 and under 57.5 cents. 57.5 and under 67.5 cents. 57.5 and under 67.5 cents. 57.5 and under 77.5 cents. 57.5 and under 82.5 cents. 57.5 and under 82.5 cents. 57.5 and under 82.5 cents. 57.5 and under 92.5 cents. 57.5 and under 10.0 cents. 57.5 and under 10.0 cents. 57.5 and under 110.0 cents. 57.5 and under 120.0 cents. 57.5 and under 120.0 cents.	1.4 2.0 3.5 4.5 6.2 5.3 15.7 10.5 10.5 10.5 1.2 1.2 1.2 1.2 1.2 2 .3	0.1 .1 .3 .6 .9 1.7 2.8 10.3 7.0 9.4 14.1 10.0 4.6 4.6 2.2 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	0. 5 1. 2 1. 8 2. 5 4. 3 5. 5 7. 7 6. 1 17. 8 11. 0 16. 7 7. 2 2 3. 2 1. 7 6 3. 1 (2) (2) (2)	0. 5 7 2. 7 3. 8 3. 0 6. 2 6. 3 9. 8 11. 0 12. 1 9. 2 2 10. 7 7 7. 6 4. 1 1. 3 1. 6 6. 6 3 2 (2)	1. 1 . 6 2. 3 1. 1 4. 0 4. 3 4. 8 2. 2 12. 2 15. 5 14. 5 5. 1 9. 7 3. 4 2. 0 1. 4 . 3		0. 2 . 2 . 9 1. 5 1. 7 3. 4 8. 5 13. 7 10. 0 17. 7 20. 3 9. 1 1. 0 1. 0 1. 0 1. 0 1. 0 2. 7 2. 1 1. 0 1. 0 1. 0 1. 0 1. 0 1. 0 1. 0 1	0. 2 . 7 4. 4 3. 2 10. 4 12. 9 16. 5 10. 7 6. 8 7. 5 8. 5 4. 6 1. 5 4. 1 1. 0 1. 0 1. 0 1. 0		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100	
Number of workers	5, 403	1, 377	4, 026	2, 182	352	1,830	1, 963	412	1,	

Includes New Jersey.
 Less than a tenth of 1 percent.

#### VARIATIONS BY SEX AND SKILL

In the northern wage area, the average hourly earnings of males exceeded those of females by 14.2 cents. The difference amounted to

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20.5 cents for skilled, 9.8 cents for semiskilled, and 12.1 cents for unskilled workers. Semiskilled females, who constituted over two-thirds of the total labor force, averaged 39.0 cents. The unskilled males averaged about the same, namely 39.5 cents. The average of semiskilled females, however, was 4.7 cents less than that of skilled females, 9.8 cents less than that of semiskilled males, and as much as 25.2 cents less than that of skilled males. It was 11.6 cents higher than the average of the unskilled females.

The hourly earnings of males in the southern wage region averaged 38.1 cents, which is 7.2 cents higher than the average for females. The differences are 15.4 cents for skilled, 3.7 cents for semiskilled, and 5.4 cents for unskilled workers. In the South, as in the North, the semiskilled females constituted over two-thirds of the total labor force. The hourly earnings of this group averaged 31.3 cents, which may be compared with 48.1 cents for the skilled males, 35.0 cents for the semiskilled males, and 32.7 cents for the small group of skilled females. In comparison with the earnings of unskilled workers, however, the semiskilled females averaged 2.0 cents more than the males and 7.4 cents more than the females.

#### EARNINGS IN RELATION TO FAIR LABOR STANDARDS ACT

Under the provisions of the Fair Labor Standards Act, the 25-cent minimum wage rate for plants engaged in interstate commerce became effective on October 24, 1938. At the time of the survey (August and September 1938), only 6.7 percent of all workers in the knitted-underwear industry were averaging below 25 cents an hour. This total included 2.7 percent of the males and 7.9 percent of the females. In the northern wage region, the number of workers paid under 25 cents amounted to only 1.0 percent of the males and 6.1 percent of the females. The respective proportions in the South, however, were much larger, namely 7.5 percent and 14.1 percent.

In August and September 1938, nearly one-fifth (18.9 percent) of the wage earners in the country as a whole averaged less than 30 cents an hour, the minimum in effect on October 24, 1939. This total included only 6.8 percent of the males, however, as compared with 22.4 percent of the females. In the North, the proportions were 3.1 percent for males and 15.6 percent for females, while the respective percentages in the southern wage area were 17.1 and 45.5.

Considerably over one-half (57.6 percent) of the workers in the industry were averaging under 40 cents an hour, which is the highest minimum permitted to be fixed under the provisions of the Fair Labor Standards Act. One-third (33.0 percent) of the males, as compared with nearly two-thirds (65.0 percent) of the females, were included in this category. One-half (49.4 percent) of the workers

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in northern plants received below 40 cents. The proportions in this region were 21.6 percent for males and 57.4 percent for females.

In the southern wage area, over four-fifths (83.4 percent) of the workers (65.2 percent of the males and 89.7 percent of the females) averaged less than 40 cents.

#### OCCUPATIONAL DIFFERENCES

According to table 6, which presents occupational averages for the country as a whole, working foremen had the highest hourly earnings in the knitted-underwear industry, amounting to 79.0 cents. The average of skilled male machine fixers was 71.5 cents, while the hourly earnings of the remaining male skilled occupations, outside of the miscellaneous groups, ranged from 48.4 cents for hand cutters to 54.7 cents for flat knitters. The most important male skilled occupation numerically is that of circular knitters, who averaged 51.4 cents.

Table 6.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings in Knitted. Underwear Industry, by Skill, Sex, and Occupation, August and September 1938

Skill, sex, and occupation		Average hourly earnings	Average weekly hours	A verage weekly earnings
Skilled workers				
fale:				
Cutters, hand 2		\$0.484	40.4	\$19.5
Cutters, machine 2	172	. 525	39.7	20.8
Foremen, working 4	102	. 790	44.6	35, 2
Knitters, circular 3	349	. 514	37.5	19.3
Knitters, flat 3	43	. 547	37.7	20.6
Machine fixers 4	166	. 715	42.3	30.2
Miscellaneous skilled workers, knitting department	19	. 750	36.0	26.9
Miscellaneous skilled workers, direct, other	21	. 681	44.8	30.
Miscellaneous skilled workers, indirect		. 654	45.0	29.
emale:				1
Cutters, hand 2	162	. 365	35.6	12.
Cutters, machine 2	38	. 400	35, 9	14.
Forewomen, working 4	41	. 526	41.9	22.
Knitters, circular 8	114	. 415	37.2	15.
Knitters, flat 3	10	(1)	(1)	(1)
Loopers 2	48	. 408	37.2	15.
Miscellaneous skilled workers, knitting department	41	. 473	38. 2	18.
Miscellaneous skilled workers, direct, other	2	(1)	(1)	(1)
Semiskilled workers		1		
fale:				100
Brush-machine operators 3	39	. 376	40. 3	15.
Clerks, factory 4	144	. 480	43.3	20.
Dye-machine operators 4	51	. 427	41.7	17.
Firemen	64	. 434	52. 9	22.
Lavers-up <sup>2</sup>	112	. 509	38. 2	19
Machine operators, miscellaneous 4	138	. 427	39.9	17.
Markers, stampers, and labelers 1	33	. 428	35.0	14
Packers 4	199	. 420	41.1	17.
Steamers and pressers 4	154	. 434	39.5	17
Stock handlers 4	43	. 420	42.6	17
		. 558	42.9	23
Subforemen, working 4	57	. 432	39.8	17
Winders	34	. 442	30.2	13
Miscellaneous semiskilled workers, knitting department		. 460	39. 2	18
Miscellaneous semiskilled workers, direct, other		. 415	36. 0	14
Miscellaneous semiskilled workers, direct, other	90	. 441	43.9	19

See footnotes at end of table.

TABLE 6.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings in Knitted-Underwear Industry, by Skill, Sex, and Occupation, August and September 1938—Con.

Skill, sex, and occupation	Number of work- ers	Average hourly earnings	Average weekly hours	Average weekly earnings
Semiskilled workers—Continued				
Female: Buttonhole-machine operators * Button sewing-machine operators * Clerks, factory * Edgers * Finishers, miscellaneous * Folders, wrappers, and boxers * Inspectors and examiners *	226 74 599 237 874	\$0.372 .353 .367 .370 .387 .361 .364	31. 3 32. 9 40. 7 34. 9 35. 3 36. 5 35. 9	\$11. 64 11. 60 14. 93 12. 92 13. 67 13. 18 13. 06
Ironers, hand <sup>2</sup> Layers-up <sup>2</sup> Machine operators, miscellaneous <sup>4</sup> Markers, stampers, and labelers <sup>2</sup> Menders, hand <sup>2</sup> Reinforcers <sup>2</sup>	57 133 77 128 144 434	. 379 . 379 . 357 . 372 . 358 . 393	31. 4 40. 5 35. 8 33. 3 36. 3 31. 0	11. 92 15. 37 12. 78 12. 41 13. 00 12. 18
Seamers <sup>3</sup> Steamers and pressers <sup>4</sup> Subforewomen, working <sup>4</sup> Tape stringers <sup>2</sup> Trimmers, hand <sup>2</sup> Winders <sup>3</sup> Miscelleneous semiskilled workers, knitting department	130 78 66 180 236	. 371 . 379 . 436 . 361 . 348 . 430 . 387	35. 4 34. 9 41. 5 30. 2 33. 7 29. 6 38. 6	13. 14 13. 24 18. 09 10. 91 11. 72 12. 73 14. 96
Miscellaneous semiskilled workers, direct, other	204	. 363	34.6	12. 56
Unskilled workers				
Male: Janitors and cleaners Learners and apprentices 4. Watchmen Work distributors 4. Miscellaneous, unskilled workers, direct Miscellaneous, unskilled workers, indirect Female:	75 26 85 204 48	. 341 . 282 . 362 . 370 . 418 . 381	42, 8 38, 2 49, 0 38, 6 43, 7 43, 2	14. 26 18. 28
Janitresses and cleaners Learners and apprentices 4 Work distributors 4 Miscellaneous unskilled workers, indirect	314	. 329	40. 0 37. 9 38. 1	8.96

Not a sufficient number of workers to permit the presentation of an average.

Sewing-department occupation.

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weekly arnings

> \$19, 52 20, 83 35, 22 19, 31

20. 61 30. 23 26. 98 30. 51 29. 41

12.99 14.39

22, 02 15, 45

(1) 15. 20

18.08

20. 80 17. 80 22. 99 19. 44 17. 06 14. 98 17. 13 17. 91 23. 95 17. 20

13.37

Knitting-department occupation.
 Employees in this group may work in both sewing and knitting departments.

Among the skilled females, the working forewomen received the highest earnings, averaging 52.6 cents an hour. The lowest average was 36.5 cents for hand cutters. The remaining occupations, outside of the miscellaneous groups, averaged 40–42 cents. It will be observed that three important skilled occupations contained substantial numbers of both males and females. In each case, however, the average hourly earnings of males exceeded those of females, the differences amounting to 12.5 cents for machine cutters, 11.9 cents for hand cutters, and 9.9 cents for circular knitters. It is also interesting to note that for both males and females the average hourly earnings for hand cutters were lower than those for machine cutters.

For the semiskilled males, the average hourly earnings ranged from 55.8 cents for working subforemen to 37.6 cents for brush-machine operators. The layers-up averaged 50.9 cents and the factory clerks

<sup>&</sup>lt;sup>11</sup> In making comparisons of hourly earnings between males and females in a given occupation, however, it must be borne in mind that in many instances the duties of female employees vary from those of males even though the same occupational designation is used.

48.0 cents. Hourly earnings in the remaining occupational classes covered a fairly narrow spread, namely from 40.0 to 44.2 cents.

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The working subforewomen were the highest paid among the semi-skilled females, averaging 43.6 cents an hour, while the lowest hourly earnings were received by inspectors and examiners, who averaged 34.5 cents. The seamers, who made up over one-fourth (28.8 percent) of the total labo. force, had an average of 37.1 cents.

Both males and females are employed in four of the semiskilled occupations for which separate figures are shown. In each case, the average hourly earnings of males exceeded those of females, the differences amounting to 1.2 cents for winders, 5.5 cents for steamers and pressers, 5.6 cents for markers, stampers, and labelers, and as much as 13.0 cents for layers-up.

Among the unskilled males, outside of learners and apprentices, the occupational averages ranged from 34.1 to 41.8 cents an hour. Male learners and apprentices averaged 28.2 cents, as compared with 23.7 cents for female learners and apprentices.

#### PART 2.—KN1TTED OUTERWEAR

## Description of Industry

#### SIZE OF INDUSTRY

As defined by the Census of Manufactures, the knitted-outerwear industry in 1937 included 669 plants having a product valued at \$5,000 or more. The average number of wage earners for the year was 26,139.

The total value of products, including receipts for contract work, <sup>12</sup> was \$106,836,039, while the value added by manufacture was \$47,311,118. The wages paid by the industry totaled \$21,553,531, which was 20.2 percent of the total value of products and 45.6 percent of the value added by manufacture.

A very large proportion of the products of the knitted-outerwear industry consists of sweaters, sweater coats, and jerseys. Among the other items accounting for a substantial part of the total product value are bathing suits, dresses, and suits, infants' wear, polo or sport shirts, and knit headwear.

#### ANALYSIS OF SAMPLE

The sample in this survey covered 105 establishments and 7,230 wage earners. Although the manufacture of knitted outerwear is heavily concentrated in the Middle Atlantic States, significant portions of the industry are found in other parts of the country. In terms of the survey's coverage, New York is the leading State, including 20.2

<sup>13</sup> The industry reported 164 establishments, with 2,715 wage earners, classed as contract factories, which are engaged in manufacturing knitted outerwear out of materials owned by others.

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percent of the total workers. Pennsylvania ranks second with 15.4 percent of all wage earners, and Massachusetts is next with 15.1 percent. Other important States are Ohio, Wisconsin, and California. Less than 10 percent of the employees were found in the South.<sup>13</sup>

Most of the establishments in the knitted-outerwear industry are small, with very few employing over 500 workers. An analysis of the coverage in this survey shows that 17 plants had between 10 and 20 wage earners, 37 between 21 and 50, 24 between 51 and 100, 17 between 101 and 250, and 10 over 250 employees.

Another outstanding feature of the industry is the marked concentration of establishments in the large metropolitan centers, particularly in New York City. Of the plants surveyed, 81 with 4,248 workers were found in communities with a population of about 750,000 and more, including 40 establishments with 1,390 wage earners in the New York metropolitan area. Only 13 plants with 1,634 employees were located in places of about 50,000 population and under, while 11 establishments with 1,348 workers were in communities of about 175,000 to 500,000.

Judged on the basis of the survey's coverage, labor organization is important, although not dominant, in the industry. Of the total in the sample, 33 plants, with about one-third of the wage earners, had either oral or written agreements with national unions. A majority of the agreements were with the International Ladies' Garment Workers Union, but several other labor organizations, including the United Textile Workers and the American Federation of Hosiery Workers, were represented.

On the basis of product, the establishments covered may be classified in several groups. Of the total, 72 plants were engaged primarily in making sweaters, 10 manufactured women's suits and dresses, 4 headwear, and 4 bathing suits, while the remaining 15 mills could not be classified because of the miscellaneous nature of their products. These categories are by no means precise, however, as the type of product in many establishments changes in accordance with seasonal demands. For example, some of the sweater mills make bathing suits during certain periods of the year. Likewise, the dress and suit plants also produce light sweaters occasionally. Many of the sweater mills also make other knitted garments, such as headwear, gloves and mittens, and scarfs.

Industrial home work is found in the knitted-outerwear industry. Because of the almost complete absence of records as to the hours of work and production of individual home workers, however, it was not possible to include these employees within the scope of the survey.

<sup>&</sup>lt;sup>13</sup> Among the other States included in the survey are Connecticut, Illinois, Michigan, Mississippi, New Jersey, North Carolina, Oregon, Rhode Island, Utah, Virginia, and Washington.

#### COMPOSITION OF LABOR FORCE

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The equipment used in the manufacture of knitted outerwear includes circular and flat knitting machines, ribbers, brushers, calenders, pressers, cutters, and several types of sewing machines, some of which are highly specialized. In general, two methods of production are employed. Certain garments, such as heavy sweaters and bathing suits, are usually made on flat knitting machines, which shape the articles during the knitting process by means of various controlling devices. Polo shirts, light sweaters, and suits and dresses, on the other hand, are commonly made of tubular or flat knit cloth, which is marked and cut according to a pattern, the parts thus produced being sewed together to form a garment.

These manufacturing processes require a large number of skilled workers. According to table 7, 62.9 percent of the 7,230 wage earners included in the survey were classed as skilled. On the other hand, the number of unskilled workers amounted to only 4.8 percent of the total. In fact, this number is too small to justify a separate analysis. The unskilled employees were, therefore, combined with the semiskilled in all tabulations except those showing occupational averages. Of the total workers, three-fourths (75.4 percent) were females, who were chiefly employed in the various sewing-machine operations. The proportion of women was approximately the same in both the skilled and the semiskilled and unskilled groups.

Table 7.—Average Hourly Earnings in Knitted-Outerwear Industry, by Skill and Sex, August and September 1938

Skill and sex	Work	Average		
Skill and sex	Number	Percent	hourly earnings	
All workers	7, 230	100. 0	\$0.45	
	1, 778	24. 6	.65	
	5, 452	75. 4	.30	
Skilled workers  Male Female Semiskilled and unskilled workers  Male Female	4, 549	62. 9	. 50	
	1, 098	15. 2	. 77	
	3, 451	47. 7	. 4	
	2, 681	37. 1	. 31	
	680	9. 4	. 42	
	2, 001	27. 7	. 3	

# Average Hourly Earnings METHODS OF WAGE PAYMENT

The straight piece-rate method of wage payment is used extensively in the knitted-outerwear industry. Of the 105 establishments surveyed, 83 paid all or part of their employees on that basis, while 22 plants paid straight time rates to all workers. About one-half (49.7 percent) of all employees in the industry were paid on a piece-rate

basis. Only 3 establishments had production-bonus systems, which covered 390 workers, or 5.4 percent of the total included in the survey. Piece rates and production-bonus plans commonly apply to the important direct occupations, such as the knitters, cutters, and various sewing-machine operators.

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(49.7 -rate The method of wage payment varied considerably among the several skill and sex groups. For male employees, the proportion of piece workers amounted to 32.9 percent of the skilled, 28.6 percent of the semiskilled, and 2.3 percent of the unskilled workers. For the females, on the other hand, the proportions were respectively 59.3, 54.2, and 29.4 percent.

At the time of the survey, a majority of the establishments covered paid only the regular rates for overtime work.<sup>14</sup>

Of the 72 nonunion plants, 58 paid the regular rates for overtime. Among the remaining 14 nonunion establishments, 3 paid time and a half and 4 time and a third for overtime. Two mills paid time and a fourth and four time and a third for overtime by hourly workers, while the piece-rate employees received only the regular rates. One plant paid time and a half to hourly workers, while piece workers received only the regular rates for overtime.

Among the 33 trade-union establishments, 8 paid the regular rates, 6 time and a half, 7 time and a third, and 2 time and a fourth for overtime. In nine plants, hourly workers received overtime rates of time and a third, while the piece workers were paid only the regular rate. Overtime rates for both hourly and piece-rate employees in one establishment varied from time and a third to time and a half, depending upon the amount of overtime worked.

#### HOURLY EARNINGS OF ALL WORKERS

The hourly earnings of all workers included in the survey averaged 45.8 cents in August and September 1938. The hourly earnings of the individual employees, however, varied considerably, according to the distribution in table 8. For example, the earnings of all but 3.1 percent of the wage earners covered a spread from 17.5 cents to \$1.20 an hour.

Thus, about one-eighth of the employees are found in each of the four 5-cent intervals from 27.5 to 47.5 cents an hour. It will be observed that approximately one-third (34.5 percent) averaged 47.5 cents and over, but only 3.5 percent received \$1.00 or more. The number paid under 27.5 cents amounted to 14.9 percent of the total labor force.

<sup>14</sup> Three establishments paid higher rates for extra-shift operation, but the number of workers involved was negligible.

#### VARIATIONS BY SEX AND SKILL

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The average hourly earnings for all male employees was 62.2 cents, which may be compared with only 39.8 cents for all females, a difference of 22.4 cents.

Nearly two-thirds (65.2 percent) of the males, as compared with one-fourth (24.5 percent) of the females, received 47.5 cents or more an hour. One-eighth (12.6 percent) of the males, as against less than 1 percent of the females, averaged \$1.00 or over. The number paid under 27.5 cents amounted to 6.7 percent of the males and 17.7 percent of the females.

Skilled males averaged 74.1 cents an hour, or 30.6 cents more than the average received by the group of semiskilled and unskilled males. The difference by skill was considerably less in the case of females, the skilled group averaging 41.8 cents, as against 36.2 cents for the semiskilled and unskilled workers.

Table 8.—Percentage Distribution of Workers in Knitted-Outerwear Industry According to Average Hourly Earnings, by Skill and Sex, August and September 1938

Average hourly earnings	All workers		Skilled workers			Semiskilled and un- skilled workers			
Average noursy carmings	Total	Male	Fe- male	Total	Male	Fe- male	Total	Male	Fe- male
Under 17.5 cents		0.3	2.3	1.3		1.7	2.6	0.9	3
7.5 and under 20.0 cents	2.3	.6	2.9	1.8	0.1	2.4	3. 1	1.3	3
0.0 and under 22.5 cents	2.8	1.8	3.2	2.0	.5	2.5	4.2	3.8	4
2.5 and under 25.0 cents	2.7	1.4	3. 1	1.9	. 5	2.4	4.0	2.9	4
5.0 and under 27.5 cents		2.6	6. 2	4.0	.6	5. 1	7.5	5.9	8
7.5 and under 30.0 cents.		1.7	7.3	5. 5	. 5	7.1	6.7	3.7	7
0.0 and under 32.5 cents		3. 1	7.6	5.6	1.4	7.0	8.1	6.0	8
2.5 and under 35.0 cents		3.4	6.1	4.5	1.5	5. 5	7.0	6.5	1
5.0 and under 37.5 cents	7.7	4.6	8.6	6.6	2.0	8.1	9.4	8.8	1
7.5 and under 40.0 cents		2.8	7.3	6.0	1.6	7.4	6.5	4.7	
0.0 and under 42.5 cents		3.3	7.9	6.4	1.5	7.9	7.3	6.0	1
2.5 and under 47.5 cents		9.2	13.0	12.3	6.1	14. 1	12.0	14. 4	1
7.5 and under 52.5 cents	8.5	8.5	8.3	8.9	8.3	9.1	7.4	9.1	1
2.5 and under 57.5 cents		7.1	5. 4	6. 4	7.5	6.0	4.8	6.5	
7.5 and under 62.5 cents		6.4	3. 1	4.6	6.6	3.9	2.9	5.9	
2.5 and under 67.5 cents		4.9	2.3	3.4	5.6	2.7	2.2	3.8	
7.5 and under 72.5 cents		4.9	2.0	3.4	6.3	2.4	1.7	2.6	
2.5 and under 77.5 cents		6.0	1.2	3. 1	8.1	1.5	1.0	2.5	
.5 and under 82.5 cents	1.5	4.7	. 5	1.9	5.9	.7	.7	2.6	
2.5 and under 87.5 cents		3.9	. 6	2.1	6.0	. 9	.3	. 6	
.5 and under 92.5 cents		2.5	.3	1.2	3.7	.4	.2	. 6	
2.5 and under 100.0 cents		3.7	. 3	1.7	5.6	.4	. 2	. 6	(1
0.0 and under 110.0 cents		5.1	. 2	2.2	8.1	.3	.1	.1	(1
0.0 and under 120 0 cents		2.7	.2	1.2	4.3	.3	.1	.1	(1
20.0 cents and over	1.3	4.8	.1	2.0	7.7	. 2	(1)	.1	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	10
Tumber of workers	7, 230	1,778	5, 452	4, 549	1,098	3, 451	2, 681	680	2,1

<sup>1</sup> Less than a tenth of 1 percent.

Among the skilled employees, over four-fifths (83.7 percent) of the males and over one-fourth (28.8 percent) of the females received 47.5 cents or more an hour. The numbers averaging \$1.00 or over amounted to one-fifth (20.1 percent) of the males and less than 1 percent of the females. Only 1.7 percent of the skilled males, as compared with 14.1 percent of the skilled females, were paid under 27.5 cents.

In the group of semiskilled and unskilled workers, 35.1 percent of the males and 16.8 percent of the females received 47.5 cents or more an hour. The number receiving under 27.5 cents amounted to 14.8 percent of the males and 23.7 percent of the females.

#### EARNINGS IN RELATION TO FAIR LABOR STANDARDS ACT

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At the time of the survey, one-tenth (9.6 percent) of the workers averaged under 25 cents an hour, which was the minimum established by the Fair Labor Standards Act on October 24, 1938. Only 4.1 percent of the males, as compared with 11.5 percent of the females, received less than this amount. The proportions were only 1.1 percent for skilled males and 9.0 percent for skilled females. In the semi-skilled and unskilled group, 8.9 percent of the males averaged under 25 cents, while 15.6 percent of the females were paid below that figure.

In August and September 1938, one-fifth (20.8 percent) of all employees received under 30 cents an hour, the minimum effective on October 24, 1939. The proportion amounted to 8.4 percent of the males, as against exactly one-fourth of the females. Among the skilled workers, only 2.2 percent of the males and 21.2 percent of the females received less than 30 cents. Substantial proportions of males and females in the semiskilled and unskilled group were paid less than 30 cents, the respective figures being 18.5 and 31.5 percent.

The number of employees averaging under 40 cents an hour amounted to 46.6 percent of the total labor force at the time of the survey, the proportions being 22.3 percent for males and 54.6 percent for females. Only 8.7 percent of the skilled males averaged less than 40 cents, while half (49.2 percent) of the skilled females were paid below that figure. Among the semiskilled and unskilled workers, the proportions amounted to 44.5 percent and 64.2 percent.

#### OCCUPATIONAL DIFFERENCES

Table 9 shows average hourly earnings in the knitted-outerwear industry for the principal occupational classes.

The most important occupations numerically among the skilled males were the circular and flat knitters, who averaged 64.1 and 65.9 cents an hour, respectively. With one important exception, namely hand cutters, these were the lowest occupational averages shown for skilled males. The hand cutters received 56.5 cents, which may be compared with 71.4 cents for machine cutters. The highest hourly earnings were received by working foremen, who averaged 97.1 cents. The next highest-paid occupations were those of seamers (96.4 cents) and machine fixers (90.4 cents).

Among skilled women, seamers were by far the most important occupation numerically, comprising over one-half of all skilled females and over one-fourth of the total labor force. The average for this class was 41.8 cents an hour. The highest hourly earnings were received by the small group of miscellaneous skilled direct workers, who averaged 58.8 cents. This group is made up principally of designers.

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The loopers averaged 51.8 cents, or slightly higher than the hourly earnings (51.5 cents) of working forewomen. Among the remaining occupations, the average hourly earnings ranged from 44.1 cents for hemmers to 36.3 cents for circular knitters. As in the case of males, machine cutters averaged more than hand cutters, the respective figures being 44.0 and 39.5 cents.

Table 9.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings in Knitted Outerwear Industry, by Skill, Sex, and Occupation, August and September 1938

Skill, sex, and occupation	Number of workers	Average hourly earnings	Average weekly hours	Average weekly earnings
Male: Skilled workers				
Cutters, hand 2	51	\$0, 565	42.6	\$24.00
Cutters machine 2	112	.714	40.0	28.5
Foremen, working 4	87	. 971	42. 2	40.94
Foremen, working 4 Knitters, circular 3	237	. 641	44.7	28.6
Knitters, flat 3	219	. 659	42.6	28.0
Machine fixers <sup>4</sup> Pressers, garment <sup>2</sup>	89	. 904	43. 5	39, 3
Pressers, garment <sup>2</sup>	119	. 765	39.9	30.5
Seamers 2	88 48	. 964	39. 2	37.8
Miscellaneous skilled workers, direct	25	.717	33, 9 39, 5	24.3
Miscellaneous skilled workers, indirect	22	. 639	43. 3	33.5 27.6
Female:	24	. 009	20. 0	27.6
Buttonhole-machine operators 2	76	. 400	40.7	16, 2
Cutters, hand 2	224	. 395	40. 4	15.9
Cutters, machine <sup>2</sup> Finishers, miscellaneous <sup>2</sup>	50	. 440	40.3	17.7
Finishers, miscellaneous 2	143	. 423	38, 7	16.3
Forewomen, working 4	80	. 515	43. 2	22.2
Hemmers <sup>2</sup> Inspectors and examiners <sup>4</sup>	151	. 441	34.8	15.
Unittors circular 3	338 92	. 368	37.6	13.1
Knitters, circular <sup>3</sup> . Knitters, flat <sup>3</sup>	14	(1)	40.9	14.1
Loopers 2	112	. 518	36.9	19.
Menders, hand 2	186	. 413	38. 5	15.
Seamers 2	1. 943	. 418	37. 3	15.
Miscellaneous skilled workers, knitting department	18	(1)	(1)	(1)
Miscellaneous skilled workers, direct	24	. 588	42.5	24.1
Male: Semiskilled workers				
Clerks, factory 4	77	. 557	43, 3	24.
Machine operators, miscellaneous 4	59	. 460	41.9	19.
Packers 4	77	. 395	45, 9	18.
Steamers and pressers 4		. 467	41.0	19.
Winders 3	18	(1)	(1)	(1)
Miscellaneous semiskilled workers, knitting department Miscellaneous semiskilled workers, direct	32 62	. 409	43. 4 40. 6	17. 19.
Miscellaneous semiskilled workers, indirect	23	. 455	48. 0	21.
Female:	20	. 300	10.0	*1.
Button sewing-machine operators 2	51	. 378	37.0	13.
Clerks, factory 4	35	, 403	40. 1	16.
Edgers 2	68	. 421	35.6	14.
Folders, wrappers and boxers <sup>2</sup> Machine operators, miscellaneous <sup>4</sup>	304	. 355	38, 8	13.
Machine operators, miscellaneous	42	. 362	38.0	13.
Markers 2.	54	. 314	40.0	12.
Sewers, hand 2	475	. 363	36.3	13.
Steamers and pressers <sup>2</sup>	57 209	. 346	42. 2 35. 8	14.
Winders 3	216	. 426	37.1	15.
Miscellaneous semiskilled workers, knitting department	36	. 413	41.1	17
Miscellaneous semiskilled workers, direct	284	.378	39. 0	14
Male: Unskilled workers				
Learners and apprentices 4.	37	. 344	43, 3	14
Miscellaneous unskilled workers .direct	52	, 358	41.1	14
Miscellaneous unskilled workers, indirect	88	. 349	46.0	16
Female:		115		
Learners and apprentices	115	. 233	37. 5	8
Miscellaneous unskilled workers, direct. Miscellaneous unskilled workers, indirect.	48	. 361	34.9	15

1 Not a sufficient number of workers to permit the presentation of an average.

Sewing-department occupation.
 Knitting-department occupation.
 Employees in this group may work in both sewing and knitting departments.

hourly Innaining workents for fall males, tion pective ploy

i Knitted 1938

Average weekly earnings

> \$24. (9 28. 55 40. 94 28. 66 28. 66 39. 36 30. 56 37. 85 24. 30 33. 57 66 16. 28 17. 76 16. 28 17. 63 18. 32 18. 35 19. 3

22. 24 15. 35 13. 84 14. 85 (1) 19. 10 15. 87 15. 60 (1) 24. 97

24, 12 19, 27 18, 14 19, 11 (1) 17, 76 19, 71 21, 84

13. 99 16. 16 14. 99 13. 80 13. 74 12. 57 13. 15 14. 58 11. 74 15. 82 17. 00 14. 75

14.89 14.74 16.05 8.74 12.59 It will be observed that, with the exception of miscellaneous direct workers, all of the occupational averages reported for skilled females fall below the hourly earnings shown for skilled males. For all occupations in which significant numbers of both men and women are employed, a substantial differential is found in favor of males, ranging from 17.0 cents for hand cutters to as much as 54.6 cents for seamers.

Factory clerks showed the highest earnings among semiskilled males, averaging 55.7 cents an hour. Packers had the lowest average, 39.5 cents, and miscellaneous semiskilled workers in the knitting department averaged 40.9 cents. The averages of the remaining occupations ranged from 48.6 to 45.5 cents, with steamers and pressers, who constituted the largest class among semiskilled males, receiving 46.7 cents. The unskilled occupational classes for males averaged about 34–36 cents. Male learners and apprentices, with an average of 34.4 cents, occupied the bottom of the scale.

The occupational averages of semiskilled females ranged from 42.6 cents for winders to 31.4 cents for markers. It will be seen that there is considerable overlapping between the averages of semiskilled and skilled occupations among females, which is evidence of the difficulty in classifying female occupations according to skill. In fact, the miscellaneous direct unskilled females averaged more than a number of semiskilled occupations. The average for learners and apprentices amounted to only 23.3 cents.

#### OTHER FACTORS INFLUENCING HOURLY EARNINGS

Thus far, the analysis has been confined to an examination of variations in hourly earnings in the outerwear industry arising from differences in the sex, skill, and occupation of the workers. Another important aspect of the industry's wage structure, however, concerns various factors related to the establishments in the industry. Among these factors are geographical location, size of community, unionization, size of company, and type of product.

That some of these factors are related to the wage structure in the various establishments is indicated by the fact that the plant averages cover a fairly wide range, namely from 18.7 cents to \$1. Of the 105 establishments included in the survey, about one-fourth averaged under 40 cents an hour, one-fourth between 40 and 50 cents, one-fourth between 50 and 60 cents, and the remaining fourth 60 cents and over.

An examination of the data reveals little evidence of geographical differences in average hourly earnings in this industry. It is true that the 3 southern establishments included in the survey had averages of 30 cents an hour or less, which is probably indicative of the wage level in the small part of the industry located in that region. Moreover, very few establishments in the other regions averaged 30 cents

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or lower. It will be observed, however, that the data cover a fairly wide range in each of the other regions. In New York State, for example, the plant averages varied from 24.2 cents (and from 35.9 cents if the lowest-paid establishment is omitted) to \$1. The distribution for Pennsylvania covered a spread from 29.2 to 63.4 cents for all but one plant, which averaged as high as 81.0 cents. On the Pacific coast, the average hourly earnings varied from 36.5 to 69.9 cents. This indicates that other factors than mere geographical location are responsible for the wide differences in wages.

On the other hand, an analysis of the data shows that hourly earnings vary in accordance with size of community. The average hourly earnings of all employees in establishments located in places of about 50,000 population and under amounted to 34 cents. This group of plants includes the 3 southern establishments but even with the latter excluded the average is only 40 cents. By contrast, the hourly earnings of workers in plants found in communities between 175,000 and 500,000 averaged 45 cents. Practically the same average was found in metropolitan areas with 750,000 and over, excluding Philadelphia and New York City, which averaged respectively 55 and 61 cents.

An examination of the figures also shows the relationship between unionization and hourly earnings. On the basis of the sample, union plants in this industry were confined entirely to the larger communities, as none of the establishments covered in places of about 50,000 population and under was found to have agreements with unions. With the exception of New York City, there appears to be little difference between wage levels in the union and nonunion plants located in the same communities. If a comparison is made between the union and nonunion establishments in the larger cities, other than New York and Philadelphia, it is found that the averages in both cases are about 45 cents an hour. Philadelphia, however, in which all but 4 of the 13 plants covered are union plants, has an average of 55 cents an hour. There is little, if any, difference in the earnings in union and nonunion plants. In the New York metropolitan area, however, average hourly earnings were substantially higher in the 16 union than in the 24 nonunion plants, the figures being 75 and 55 cents, respectively.

The average hourly earnings of all establishments in Philadelphia was considerably higher than the average covering the plants in other communities of about 750,000 and over, outside of New York City. This difference is probably due to the element of unionization. On the other hand, the higher average found in New York City, as compared with other metropolitan areas of about 750,000 and over, is due to the elements of unionization and size of community. This is indicated by the fact that the average of the nonunion establishments

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in New York City was almost identical with that for all plants in philadelphia.

It has previously been pointed out that very few establishments in this industry employ more than 500 wage earners. A comparison of the averages for plants of various sizes under that limit fails to reveal any significant relationship between size of establishment and hourly cornings.

Whether or not there is any relationship between type of product made and average hourly earnings cannot be determined on the basis of data secured in this survey, due to the thinness of the sample with respect to plants making products other than sweaters.

#### PART 3.-KNITTED CLOTH

## Description of Industry

The Bureau's survey of the knitted-cloth industry was confined to 22 establishments, in which 1,715 wage earners were scheduled. 15

In accordance with the Census of Manufactures, the industry has been defined here to include the making of "jersey cloth, rayon tubing, corset cloth, etc., made for sale," and all other machine-knit goods not classified as hosiery, underwear, outerwear, or gloves and mittens. The distribution of establishments included in the survey according to product was as follows: 5 made fabrics for gloves, shoe linings, and similar products; 4 manufactured heavy knitted blanket and overcoating materials; 6 made tubular fabrics, chiefly for underwear; and 2 manufactured cleaning and polishing cloths. For the remaining 5 plants, the exact nature of the product was not reported.

A classification of the mills according to size (as measured by total employment) shows that a majority are relatively small. One-half of the establishments had less than 100 employees, 6 between 100 and 250, and 5 over 250 workers. Included in the latter group, however, are several commercial cloth-knitting departments of plants that were also engaged in manufacturing other products, not a part of this industry.

In view of the fact that the cloth-knitting mills sell most of their products to the garment cutting and sewing establishments, it is not surprising that the knitted-cloth industry should be concentrated in or near New York City, which is the center for that type of production. The survey included 10 plants in New York and 3 in New Jersey, all but 1 of which were in the New York metropolitan area. Of the remaining establishments, 4 were in Massachusetts and 1 each in Michigan, North Carolina, Pennsylvania, Rhode Island, and Virginia.

<sup>&</sup>lt;sup>15</sup> As defined by the Census of Manufactures, the industry in 1937 included 213 establishments (having an annual product valued at \$5,000 or more) and 11,360 wage earners (average for year). A substantial number of these plants, however, had less than 10 employees, which were excluded from the scope of this survey.

Labor organization is important in this industry. In 8 plants, the employers had contracts or understandings with national unions, namely the Textile Workers' Union of America and the International Ladies' Garment Workers' Union.

## Average Hourly Earnings

#### METHODS OF WAGE PAYMENT

A large majority of the wage earners included in the survey were paid on a time-rate basis. Although 10 of the 22 plants had some piece workers, the number of employees on straight piece rates amounted to 8.5 percent of the total. None of the establishments reported the use of production-bonus plans.

Only 9 of the plants surveyed paid extra rates for overtime work ranging from time and one-fourth to time and one-half. The extra rates usually took effect after from 40 to 45 hours a week.

#### AVERAGE HOURLY EARNINGS OF INDIVIDUAL PLANTS

The average hourly earnings of individual establishments ranged from 32.5 to 82.7 cents. Of the 22 plants surveyed, 2 averaged under 40 cents, 4 from 40 to 50, 6 from 50 to 60, 4 from 60 to 70, and 6 70 cents and over.

Due to the small size of the industry, it is impossible to make an analysis that would reveal the relation between average hourly earnings and such factors as geographical location, size of plant, size of community, and type of product, without revealing data pertaining to individual establishments.

#### VARIATIONS BY SEX AND SKILL

The hourly earnings of all workers in the knitted-cloth industry averaged 56.0 cents in August and September 1938. (See table 10.) Although the distribution, which is shown in table 11, extends from under 17.5 cents to over \$1.20 an hour, it will be observed that over one-half (53.6 percent) of the total labor force averaged between 35 and 52.5 cents. One-tenth (10.1 percent) received less than 35 cents. On the other hand, over one-third (36.3 percent) earned 52.5 cents or more, and over one-tenth (11.4 percent) 87.5 cents or more.

The labor force of the industry is made up largely of males, who constituted 75.7 percent of the total wage earners. The skilled males amounted to one-third (33.9 percent) of all workers, while the semi-skilled and unskilled males made up 41.8 percent of the total. There were too few females in the skilled and unskilled categories to justify an analysis of this group on the basis of skill.

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Table 10.—Average Hourly Earnings, Actual Weekly Hours, and Weekly Earnings in Knitted-Cloth Industry, by Sex and Skill, August and September 1938

Commend of the	Wor	kers	Average	Average	Average	
Sex and skill	Number	Percent	hourly earnings	weekly hours	weekly earnings	
Total	1, 715	100.0	\$0.560	44. 2	\$24.74	
Males Skilled Semiskilled and unskilled	1, 298 582 716	75. 7 33. 9 41. 8	. 601 . 779 . 465	45. 2 43. 7 46. 4	27. 18 34. 05 21. 59	
Females	417	24.3	. 418	41.0	17. 16	

Table 11.—Percentage Distribution of Workers in Knitted-Cloth Industry According to Average Hourly Earnings, by Sex and Skill, August and September 1938

			Males		
Average hourly earnin	All workers	Total	Skilled	Semi- skilled and un- skilled	Females
Under 17.5 cents	0. 1				0. 2
17.5 and under 20.0 cents	.1				. 2
on 0 and under 22.5 cents	.4	0. 5		1.0	
22.5 and under 25.0 cents	.4	. 2		. 3	1. 2
25.0 and under 27.5 cents	2.9	1.3		2.4	7.7
27.5 and under 30.0 cents	1.6	1.8	0. 2	3. 2	.7
30.0 and under 32.5 cents	3.3	2.4	. 2	4. 2	6.0
32.5 and under 35.0 cents	1.3	. 5		1.0	3.8
35.0 and under 37.5 cents	6.4	5.3	. 9	8.9	9.8
37.5 and under 40.0 cents	4.1	3. 2	1.4	4.6	7. 0
40.0 and under 42.5 cents	8.5	7.8	2.7	11.9	10. 7
42.5 and under 47.5 cents	22.6	19. 3	14.3	23. 3	33. 4
47.5 and under 52.5 cents	12.0	13. 0	2.4	21.6	8.6
52.5 and under 57.5 cents	5. 2	5. 5	5. 3	5. 6	4. 3
57.5 and under 62.5 cents	1.7	1.8	1.5	2. 1	1.4
62.5 and under 67.5 cents	4.1	4.7	6.0	3.6	2.2
67.5 and under 72.5 cents	2.0	2.4	2.7	2.1	1.0
72.5 and under 77.5 cents	4.4	5.3	10.3	1.3	1.4
1 1 1000	6.0	7.9	16.1	1.3	
	1.5	2.0	4.0	.4	
		2.3		. 6	******
	1.8	5.1	5.0	.1	
10.0 and under 110.0 cents	3.9	1. 2	2.4	. 1	
120.0 cents and over	1.7	2. 3	4.8	.3	*********
Total	100. 0	100.0	100.0	100. 0	100. (
Number of workers	1,715	1, 298	582	716	417

The hourly earnings of all males averaged 60.1 cents. The average for the skilled males was 77.9 cents, which was 31.4 cents more than the average (46.5 cents) for the group of semiskilled and unskilled males. The females received 41.8 cents, or 4.7 cents less than the average for semiskilled and unskilled males.

None of the skilled males earned less than 25 cents an hour in August and September 1938, while only 1.3 percent of the group of semiskilled and unskilled males and 1.6 percent of the females were included in this category. Only 0.2 percent of the skilled males, 6.9 percent of the group of semiskilled and unskilled males, and exactly

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one-tenth of the females averaged below 30 cents. One-fifth (20.6 percent) of all workers received under 40 cents, which is the highest minimum permitted to be fixed under the Fair Labor Standards Act. This total includes only 2.7 percent of the skilled males, however, as compared with one-fourth (25.6 percent) of the group of semiskilled and unskilled males and over one-third (36.6 percent) of the females.

#### OCCUPATIONAL DIFFERENCES

Because of the small size of the industry, separate figures can be presented for only a few of the occupations commonly recognized in knitted-cloth mills. (See table 12.)

Table 12.—Average Hourly Earnings, Weekly Hours, and Weekly Earnings in Knitted. Cloth Industry, by Sex, Skill, and Occupation, August and September 1938

Sex, skill, and occupation	Number of work- ers	Average hourly earnings	Average weekly hours	Average weekly earnings
Males				
Skilled workers:				
Foremen, working	45	\$0,954	44.9	\$42.85
Knitters		747	43.1	\$42.85 32.22
Machine fixers	45	1.026	45.0	10
Miscellaneous skilled, knitting department	94	.749	43.6	46.12 32,68
Miscellaneous skilled, direct	15	(1)	(1)	(1)
Miscellaneous skilled, indirect	40	. 634	45.1	28 56
Semiskilled workers:		1.001	AU. I	20.0
Brush-machine operators	57	. 513	51.0	26. 19
Clerks, factory	49	. 554	47.0	26. 04
Dye-machine operators	121	. 496	47.2	23. 43
Machine operators, miscellaneous		. 453	47.5	21.5
Packers		. 395	48.5	19.16
Steamers and pressers	105	. 462	44.1	20.30
Miscellaneous semiskilled, knitting department	70	. 450	47. 2	21. 20
Miscellaneous semiskilled, direct	64	. 512	48.1	24.6
Miscellaneous semiskilled, indirect	16	(1)	(1)	(1)
Unskilled workers:		.,		1
Watchmen		. 442	41.7	18.4
Work distributors	46	. 374	45.6	17 0
Miscellaneous unskilled, direct		.416	40.8	16.9
Miscellaneous unskilled, indirect	22	. 404	41.8	16.8
Females				
Knitting department	273	. 431	40.2	17.3
Other departments	144	394	42.5	16.7

<sup>1</sup> Not a sufficient number of workers to permit the presentation of an average.

Male machine fixers received the highest earnings, amounting to \$1.026 an hour on the average. This was substantially higher than the earnings of working foremen, who averaged 95.4 cents. The knitters, who made up three-fifths (58.9 percent) of the skilled males, received 74.7 cents.

Among the semiskilled males, the highest earnings were received by factory clerks, who averaged 55.4 cents an hour. The dyemachine operators and steamers and pressers are the most numerous of the semiskilled males and averaged 49.6 and 46.2 cents, respectively. The lowest hourly earnings for the semiskilled males, 39.5 cents, were received by the packers.

Only two occupations among the unskilled males had enough workers justify a separate analysis. Of these, the watchmen had the higher average, 44.2 cents an hour, while work distributors earned 37.4 cents on the average.

#### PART 4.—KNITTED GLOVES AND MITTENS

## Description of Industry

The survey of the knitted gloves and mittens industry covered only 6 establishments, with 805 wage earners. Of these, 4 were located in New York State. A classification of the plants according to size (in terms of total employment) indicates that 2 had less than 100 wage earners, 2 between 100 and 250, and 2 between 250 and 500 workers.

Nearly four-fifths (78.6 percent) of the workers in the industry were females. About two-thirds (65.6 percent) of the females and less than one-half (47.7 percent) of the males were classed as skilled. The number of unskilled workers in each sex group was too limited to permit a separate analysis; hence, the figures are shown for the semiskilled and unskilled combined. (See table 13.)

Table 13.—Average Hourly Earnings, Actual Weekly Hours, and Weekly Earnings in Knitted Gloves and Mittens Industry, by Sex and Skill, August and September 1938

Con and shill	Wor	kers	Average	Average actual	Average
Sex and skill	Number	Percent	hourly earnings	weekly hours	weekly earnings
Total	805	100.0	\$0.409	33. 3	\$13. 62
	497	61.8	.432	30. 6	13. 23
	308	38.2	.379	37. 6	14. 25
Males	172	21. 4	. 585	41. 6	24. 3:
Skilled	82	10. 2	. 719	39. 4	28. 3:
Semiskilled and unskilled	90	11. 2	. 474	43. 5	20. 6:
Females. Skilled. Semiskilled and unskilled.	633	78. 6	. 345	31. 0	10. 7
	415	51. 6	. 355	28. 9	10. 2
	218	27. 0	. 330	35. 2	11. 6

## Average Hourly Earnings

All of the plants included in the survey employed a considerable number of piece workers, although some employees on a time basis were found in each establishment. The number of workers on straight piece rates amounted to 63.2 percent of the total labor force. Virtually all piece workers were found among the skilled and semiskilled females.

The average hourly earnings in 3 establishments amounted to about 40 cents. One plant had an average of about 35 cents, while the remaining establishments averaged over 40 and less than 45 cents.

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Average weekly earnings

\$42.85 32.22 46.12 32.68 (1) 28.56 26.19 26.04

26. 19 26. 04 23. 43 21. 53 19. 16 20. 36 21. 26 24. 60 (1)

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<sup>&</sup>lt;sup>16</sup> According to the Census of Manufactures, in 1937 this industry included 15 establishments (having an annual product valued at \$5,000 or more) and 3,182 wage earners (average for the year).

The hourly earnings of all workers averaged 40.9 cents in August and September 1938. The total distribution of individual earnings according to table 14, covers a relatively wide range, with significant limits at 20.0 and 82.5 cents, within which are included 97.5 percent of all employees. Over two-fifths (43.3 percent) averaged between 32.5 and 42.5 cents. The number paid under 32.5 cents amounted to 27.5 percent. Three-tenths (29.2 percent) averaged 42.5 cents or over, but only 9.1 percent received as much as 62.5 cents or more.

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The hourly earnings of the males averaged 58.5 cents, which was 24.0 cents higher than the average (34.5 cents) for the females. The skilled males averaged 71.9 cents, as compared with 47.4 cents for the group of semiskilled and unskilled males. Among the females, on the other hand, the hourly earnings of the skilled workers differed from those of the semiskilled and unskilled group by only 2.5 cents, the respective averages being 35.5 and 33.0 cents.

Approximately one-eighth (11.9 percent) of the workers in the industry averaged below 25 cents an hour in August and September 1938, while about one-fifth (21.2 percent) earned under 30 cents. About three-fifths (61.6 percent) averaged below 40 cents. However, the number of males paid less than 40 cents amounted to only 14.5 percent of the total in that group, which is of little importance due to the small number of males covered in the survey. Among the females, 14.2 percent averaged under 25 cents, one-fourth (25.4 percent) less than 30 cents, and nearly three-fourths (74.1 percent) below 40 cents.

Table 14.—Percentage Distribution of Workers in Knitted Gloves and Mittens Industry According to Average Hourly Earnings, by Skill and Sex, August and September 1938

A vorage housely consists	Λ	ll worke	rs	Ski	lled wor	kers	Semiskilled and unskilled workers			
A verage hourly earnings	Total	Male	Fe- male	Total	Male	Fe- male	Total	Male	Fe- male	
Under 17.5 cents	0.9		1.1	0.8		1.0	1.0		1.4	
17.5 and under 20.0 cents	.7		. 9	.4		. 5	1. 3		1.8	
20.0 and under 22.5 cents	7.6	3.5	8.7	3. 2		3.9	14.6	6, 7	18.0	
22.5 and under 25.0 cents	2. 7		3.5	2.6		3. 1	2. 9		4.1	
25.0 and under 27.5 cents	4.5	1.7	5. 2	4.8	1.2	5. 5	3.9	2.2	4.6	
27.5 and under 30.0 cents	4.8	.6	6.0	5.8	***	7.0	3. 2	1.1	4.	
30.0 and under 32.5 cents	6.3		8.1	7.0	~ ~ ~ ~ ~ ~	8.4	5. 2		7.3	
32.5 and under 35.0 cents	10.9	2.3	13.0	12. 7	1.2	15.0	7.8	3.3	9.6	
35.0 and under 37.5 cents	13. 3	1.7	16. 2	14. 3	* * *	17. 2	11.4	3.3	14.	
37.5 and under 40.0 cents	9.9	4.7	11.4	8.5	1.2	9.9	12.3	7.8	14.	
40.0 and under 42.5 cents	9. 2	4.7	10.4	9. 5		11.3	8.8	8.9	8.	
2.5 and under 47.5 cents		9.3	8. 2	8.7	2.4	9.9	8.1	15.6	5.	
7.5 and under 52.5 cents	6. 5	13. 4	4.6	5.8	8.5	5. 3	7.5	17.8	3.	
52.5 and under 57.5 cents	2.7	6.4	1.7	2.0	4.9	1.4	3.9	7.8	2.	
57.5 and under 62.5 cents	2.5	11.6		.8	4.9	*****	5. 2	17.8	****	
2.5 and under 67.5 cents	1.4	5.8	.2	1.4	8.5	*****	1.3	3.3		
37.5 and under 72.5 cents	. 9	3.5	.2	.8	4.9		1.0	2.2		
2.5 and under 77.5 cents	.7	2.9	.2	1.0	4.9	.2	. 3	1.1	****	
77.5 and under 82.5 cents	5. 2	23.8	.2	8.5	50. 2	.2	******	*****		
32.5 cents and over	. 9	4.1	.2	1.4	7. 2	. 2	. 3	1.1	+ * * * * .	
Total	100. 0	100. 0	100, 0	100.0	100. 0	100, 0	100.0	100.0	100.	
Number of workers	805	172	633	497	82	415	308	90	21	

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# UNION SCALES OF WAGES AND HOURS IN THE BUILDING TRADES, JUNE 1, 1939 1

## Summary

THE average union wage rate per hour was \$1.364 for all of the building trades in the 72 cities covered in a survey by the Bureau of Labor Statistics on June 1, 1939. The average for the journeyman trades was \$1.468, and for the helper and laborer trades, \$0.866.

The hourly-wage rate index for all building trades advanced to 107.4 (1929=100), a rise of 0.6 percent above 1938. Increases in wage scales were reported in 14.6 percent of the quotations comparable with 1938 and applied to about 10 percent of the total building-trades union membership included in the study.

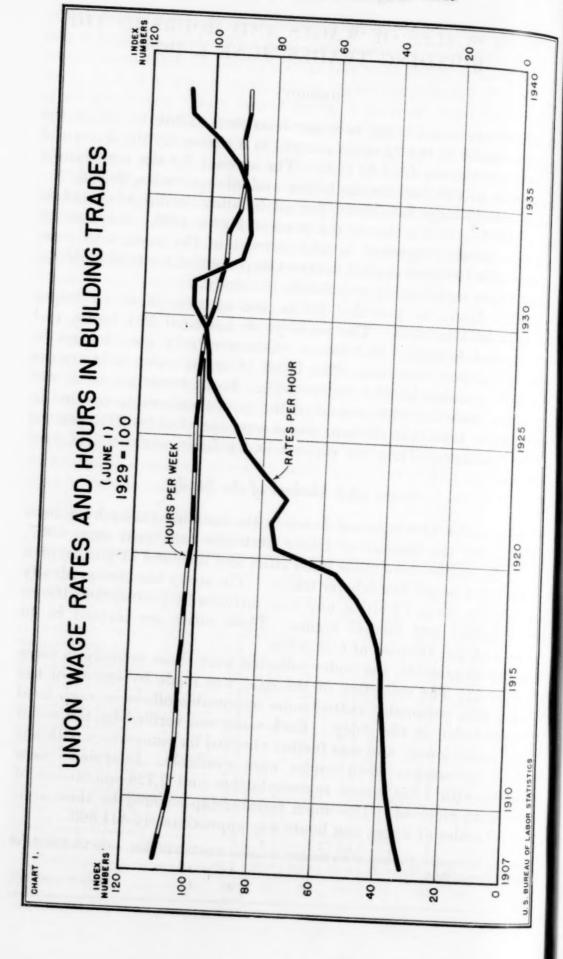
Weekly hours as provided for in the agreements of all trades averaged 38.3 in 1939. The journeymen averaged 38.1 hours, and helpers and laborers, 39.5 hours. Comparatively few changes in hour scales were reported. The index of union scales of hours declined 0.1 percent to 88.5 (1929=100). Forty hours per week was the union scale for 68.8 percent of the total membership covered in the study. Less than 40-hour scales were specified for 27.1 percent of the members. Only 4.1 percent had a basic workweek of over 40 hours.

## Scope and Method of the Study

Union scales of wages and hours in the building trades have been collected by the Bureau of Labor Statistics each year since 1907. The early studies were made in 39 cities and included 14 journeyman trades and 4 helper and laborer trades. The study has been gradually extended to cover 72 cities, and now includes 28 journeyman trades and 9 helper and laborer trades. These cities are located in 40 States and the District of Columbia.

As far as possible, the scales collected were those actually in force on June 1. The collection of the data was made by agents of the Bureau who personally visited some responsible official of each local union included in the study. Each scale was verified by the union official interviewed, and was further checked by comparison with the written agreements when copies were available. Interviews were obtained with 1,551 union representatives and 2,729 quotations of scales were received. The union membership covered by these contractual scales of wages and hours was approximately 444,000.

<sup>&</sup>lt;sup>1</sup>Prepared by Frank S. McElroy, of the Bureau's Industrial Relations Division, under the direction of Florence Peterson, chief.



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#### LIST OF CITIES COVERED

[Numerals indicate the population group in which the city was included in table 7]

## North and Pacific

Baltimore, Md. 2	New Haven, Conn. 4
Boston, Mass. 2	New York, N. Y. 1
Buffalo, N. Y. 2	Omaha, Nebr. 4
Butte, Mont. 5	Peoria, Ill. 4
Charleston, W. Va. 5	Philadelphia, Pa. 1
Chicago, Ill. 1	Pittsburgh, Pa. 2
Cincinnati, Ohio. 3	Portland, Maine. 5
Cleveland, Ohio. 2	Portland, Oreg. 3
Columbus, Ohio. 3	Providence, R. I. 3
Davenport, Iowa, included in Rock	Reading, Pa. 4
Island (Ill.) district.	Rochester, N. Y. 3
Dayton, Ohio. 4	Rock Island (Ill.) district. 4
Denver, Colo. 3	St. Louis, Mo. 2
Des Moines, Iowa. 4	St. Paul, Minn. 3
Detroit, Mich. 1	Salt Lake City, Utah. 4
Duluth, Minn. 4	San Francisco, Calif. 2
Erie, Pa. 4	Scranton, Pa. 4
Grand Rapids, Mich. 4	Seattle, Wash. 3
Indianapolis, Ind. 3	South Bend, Ind. 4
Kansas City, Mo. 3	Spokane, Wash. 4
Los Angeles, Calif. 1	Springfield, Mass. 4
Madison, Wis. 5	Toledo, Ohio. 3
Manchester, N. H. 5	Washington, D. C. 3
Milwaukee, Wis. 2	Wichita, Kans. 4
Minneapolis, Minn. 3	Worcester, Mass. 4
Moline, Ill., included in Rock Island	York, Pa. 5
(Ill.) district.	Youngstown, Ohio. 4
Newark, N. J. 3	

1930

U.S. BUREAU OF LABOR STATISTICS

#### South and Southwest

Atlanta, Ga. 3	Louisville, Ky. 3
Birmingham, Ala. 3	Memphis, Tenn. 3
Charleston, S. C. 5	Nashville, Tenn. 4
Charlotte, N. C. 5	New Orleans, La. 3
Dallas, Tex. 3	Norfolk, Va. 4
El Paso, Tex. 4	Oklahoma City, Okla. 3
Houston, Tex. 3	Phoenix, Ariz. 5
Jackson, Miss. 5	Richmond, Va. 4
Jacksonville, Fla. 4	San Antonio, Tex. 4.
Little Rock, Ark, 5	

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A union scale is a wage rate or schedule of hours agreed to by an employer (or group of employers) and a labor organization for persons who are actually working or would be working if there were work to be done in that locality. A union scale usually fixes a limit in one direction, that is, a minimum wage rate and maximum hours of work with specific provisions for overtime.

The union may be (1) either an independent local union, (2) one affiliated with a national or international federation, (3) an organization embracing one craft or more than one craft, or (4) have a contract with only one employer or more than one employer.

A collective agreement is a mutual arrangement between a union and an employer (or group of employers) regarding wages and hours and other working conditions. Collective agreements are usually written and signed by both parties, although oral agreements may be equally binding. The Bureau has included scales set under oral agreements only in those cases where there was clear evidence that the rates were actually in effect.

Apprentices and foremen.—A young person working in a trade for a definite number of years, for the purpose of learning the trade, and receiving instruction as an element of compensation, is considered an apprentice. Scales for apprentices have not been included. Scales for helpers in a number of trades were collected. In some trades the work of helpers is performed at least in part by apprentices. Whenever it was found that helpers' work was done largely by apprentices, the scales for such helpers were omitted.

No rates were collected for strictly supervising foremen nor for individuals who were paid unusual rates because of some personal qualification as distinct from the usual trade qualifications.

Union rates and actual rates.—As mentioned above, the rates of wages and hours included in this report were obtained from union business agents, secretaries, and other officials of local unions in the 72 cities visited. A large majority of the rates were recorded in written agreements, copies of which in most cases were given to the agents for the Bureau's files. Where no written records were on file in the union office, the Bureau representative listed the scales on a schedule which the union official then signed. If the Bureau representative had any reason to doubt the accuracy of these scales, he made further inquiry from persons who might be informed about the situation. It is believed that the scales collected in this survey accurately represent the union scales in effect on June 1, 1939.

It does not necessarily follow, however, that these scales are in all cases the actual wages paid or hours worked. The union agreement usually fixes the minimum wages and maximum hours. More experienced and skilled workers may command more than the union rate.

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This is especially true during periods of prosperity, when a plentiful supply of jobs creates competitive bidding for the better workmen. In periods of depression, in order to spread or share available work, actual hours worked are sometimes less than those provided in the union agreement. Where such a share-the-work policy was formally adopted by the union and in effect for a majority of the members, the adjusted scale of hours is used in this report rather than the theoretical scale appearing in the written agreement.

Union rates and prevailing rates.—This report is concerned only with the contract scales for union members on union jobs. No attempt has been made to discover what proportions of all the workers in the different occupations are members of the unions. Inasmuch as union strength varies from city to city and between trades, the prevailing scale for any occupation in any one city may or may not coincide with the union scale. Where practically all the workers of a particular trade belong to the local union, the union scale will be equivalent to the prevailing scale in that community. On the other hand, where the proportion of craftsmen belonging to the union is small, the union scale may not be the actual prevailing scale.

Averages.—The averages for each trade given in this report are weighted according to the number of members in the various local unions. Thus the averages reflect not only the specific rates provided in the union agreements but also the number of persons presumably benefiting from these rates.

Index numbers.—In the series of index numbers the percentage change from year to year is based on aggregates computed from the quotations of the unions which furnished reports for identical occupations in both years. The membership weights in both of the aggregates used in each year-to-year comparison are those reported for the second year. The index for each year is computed by multiplying the index for the preceding year by the ratio of the aggregates so obtained. The index numbers were revised on this basis in 1936 in order to eliminate the influence of changes in union membership which obscure the real changes in wages and hours.

For the trend of union rates, the table of indexes should be consulted; for a comparison of wage rates between trades or cities at a given time, the table of averages should be used.

## Trend of Union Wage Rates and Hours, 1907 to 1939

The index of union hourly wage rates for all building trades rose to 107.4, on June 1, 1939. The advance from the preceding year, however, amounted to only 0.6 percent, the smallest percentage increase recorded in any year since the present upward movement of the index began in 1934.

The relative stability of union wage rates in the building trades during the year covered by this study contrasts strongly with the up-

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ward movement which has characterized their previous advance from the depression lows of 1933. In 1934 the index rose 0.7 percent above 1933; in 1935 it advanced 1.1 percent over 1934. The years 1936 and 1937 recorded increasingly greater percentage advances over the preceding years, and the advance of 8.9 percent in 1938 surpassed all previous annual increases since 1923.

While the journeymen's wage-rate index of 106.8 represents the highest thus far obtained, it is only 0.6 percent above that for 1938. The helpers and laborers' index of wage rates advanced considerably more rapidly than that of the journeymen in 1936, 1937, and 1938, and maintained a greater relative increase in the past year, although at 112.6 it was only 0.8 percent above the 1938 index.

Table 1.—Indexes of Union Hourly Wage Rates and Weekly Hours in All Building Trades, 1907 to 1939

	Index numbers (1929=100)									
Year	All buildin	ng trades	Journe	ymen	Helpers and laborers					
	Wagerate	Hours	Wage rate	Hours	Wagerate	Hours				
1907	31.5	110.0	31, 7	109. 3	30, 7	110				
1908	33. 5	108. 3	33.8	107. 7	32. 1	113.				
1909.	35. 1	106. 8	35, 5	106. 4	33. 2	110.				
1910	36. 5	105. 5	37. 0	105. 4	34.3	108.				
1911	37. 1	105. 1	37. 6		34.5	106.				
912	37. 9		38.5	104. 8		106.				
		104. 8		104. 5	34.8	106.				
913	38, 8	104. 6	39.4	104. 2	35.8	106.				
1914	39.6	104. 2	40.3	103. 9	36, 2	105.				
915	39.9	104. 1	40.6	103. 8	36. 5	105.				
916	41. 2	103. 7	42.0	103. 4	37. 7	105.				
917	43.8	103. 5	44. 3	103. 2	41.4	104.				
918	48.6	102, 9	49.0	102. 6	48.0					
919	55. 7	102. 4	56.0	102. 0		104.				
					55. 5	103.				
1920	75. 2	101. 9	74. 9	101.7	80. 5	102.				
921	76. 6	101.8	76.3	101.6	81.3	102				
1922	71.8	101.8	71.9	101. 7	74.0	102				
1923	79.4	101.9	79. 2	101.8	78.5	102				
1924	85. 7	101.9	85. 6	101.8	84.9	102				
1925	89.0	101.9	88, 8	101. 8	87. 7	102				
926	94.8	101. 7	94.7							
000				101.6	95.6	102				
1927	98.1	101. 5	97. 9	101.4	97. 3	102				
1928	98.7	100.9	98. 7	100.7	98.3	102				
1929	100.0	100.0	100.0	100.0	100.0	100				
1930	104. 2	97. 2	104.1	97. 1	105.1	97				
931	104. 5	96.0	104. 5	95. 8	104.5	97				
1932	89.3	94. 3	89.3	94. 1	89.2	94				
1933	86.8	94. 0	86.9	93. 8		94				
004					85. 2					
1934	87.4	90. 5	87.4	90, 3	87. 7	91				
935	88, 4	89.8	88.4	89. 6	88. 2	90				
1936	91.6	89. 8	91.3	89. 6	93. 4	91				
1937	98.0	90. 2	97.6	90. 0	101.5	9				
1938	106. 7	88, 7	106. 1	88. 4	111.7	89				
1939	107. 4	88, 5	106, 8	88, 3	112.6	8				
	107. 4	00.0	100, 8	00, 0	112.0	0				

The indexes of union scales of hours per week continued to move downward, but in each case the decline was relatively slight. For all building trades combined, the index of 88.5 showed a decrease of 0.1 percent over the year. The journeymen's index of hours (88.3) also dropped 0.1 percent and the helpers and laborers' index (89.7) declined 0.2 percent. The complete series of annual index numbers from 1907 to 1939 is shown in table 1.

#### TRENDS IN INDIVIDUAL TRADES

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or all of 0.1 also lined 1907 The wage-rate index of every trade included in the survey rose somewhat between 1938 and 1939 (table 2). In most cases the rise was small, the majority moving less than a full index point. The largest advance in the journeyman group was that of the lathers' index, which is 3.3 percent higher than in 1938, bringing the current index to 116.4. The elevator constructors' helpers also had a 3.3 percent increase in their index, which rose from 104.5 in 1938 to 107.9 in 1939.

The 1939 indexes of wage rates represent all-time highs for all trades except the bricklayers, granite cutters, painters, sign painters, and stonecutters. Only the granite cutters, sign painters, and stonecutters' indexes were lower in 1939 than 10 years previously in 1929.

The steam and sprinkler fitters' helpers had the greatest advance above the 1929 level, the index now being 122.5. Three other indexes, those of the engineers (117.4), the lathers (116.4), and the composition roofers (115.2), are all more than 15 percent above 1929.

Table 2.—Indexes of Union Hourly Wage Rates and Weekly Hours in Each Building Trade, 1907 to 1939

[1929 = 100]

Year	Asbe		Brick	layers	Carpe	enters		nt fin- ers		ricians e wire- en)	Elevat	tor con-
	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours
1907			37.9	112.0	32.0	107. 2	38.5	109. 1	31.3	110.3		
1908			38.9	109.6	34.0	105.6	38. 4	108.1	34. 2	109.5		
1909			39.7	107.3	35. 9	104. 4	39.6	108.9	35.3	108.8		******
1910			40.4	105. 3	37.6	103. 1	40.0	108.7	36.3	108. 2		
1911			40.4	104. 9	38. 1	102.6	41.5	107.7	36.7	108.0		
1912			41.0	104. 9	38. 9	102.5	41.5	107.7	37.1	107.6		
1913		*****	41.7	104.7	39.5	102.4	42.5	106.5	37.9	107.2		
1914			42.8	104. 2	40.1	102.0	42.9	105.8	39.1	106.8	41.8	102.7
1915			42.9	104.1	40.6	102.0	43. 3	105.8	39.9	106. 2	42. 1	102. 2
1916	40.0	103.0	43.3	103.9	41.8	102.0	43.7	104. 2	40.7	105.3	43.1	102. 1
1917	42.1	102.6	44.8	103.6	45.5	102.0	46. 2	103.0	43.3	104.9	46. 2	101.6
1918	47.1	102, 0	48. 1	103. 6	50.5	100.9	51.0	102.5	48. 2	104. 2	49. 2	101.6
1919	57.3	101.0	53.4	103.4	58. 2	100.3	57.2	101.7	55. 2	103.3	57.3	100. 9
1920	74.5	100.9	72.8	103. 3	77.8	100. 4	77.7	101. 2	72.8	103.0	73.6	100.8
1921		101.1	72.3	103.3	78.4	100.3	80.3	101. 2	75.4	103.0	77.4	100.7
1922	70.3	101.1	70.4	103.3	72.7	100.4	74.5	101.1	71.1	103.0	72.4	100.4
1923	72.9	100.9	79.7	103.3	81.0	100.7	81.5	101.1	73.8	103.0	76.9	100.5
1924	81.4	101.0	84. 3	103. 2	86.7	100.6	90.1	101.1	82.4	102.9	86.3	100. 5
1925		101.0	89. 2	103. 1	88.5	100.6	90.6	100.8	86.7	102.9	90.5	100.4
1926		101.0	94.7	103. 2	95.0	100.6	96.7	100.8	91.3	102.9	95. 3	100.4
1927	95. 0	100.9	97.0	102. 7	98. 1	100.6	101.0	100. 5	95. 1	102. 9	98.8	100. 4
1928		100.9	97.8	102.7	98.4	100.0	100.0	99.9	96.0	102.4	99.8	100.4
1929		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930		96.3	102. 4	97.6	104.0	96. 9	106.6	96. 1	101.8	97.6	104.7	96.8
1931		94.0	102. 2	96.1	104. 2	95.4	107.0		103. 2	96.6	105.2	95.0
1932		92.8	87.5	93. 9	85. 4	93.0	93. 4		98. 5	94.3	97.9	95.0
1933		91.8	85. 2	94.9	85. 2	91.6	91.2		89.9		91.0	93. 0
1934	88. 6	91.7	84. 5	93. 3	86.7	90.8	92.1	92. 2	90.1	88.7	91. 2	92.2
1935		91.0	84. 2	93. 2	87.8	90.4	92.6	92.0	94.4	85. 1	91.3	91.9
1936		91.3	84.7	93. 2	92.3	90.5	95.0					92.
1937	100.6	91.0	90.6	94.1	98.3	90.3	101.9	91.7	101.1	89.6	96.0	92.
1938		89.5	100.1	91.0	107.1	88. 6			111. 4	89.1	107.7	91.
1939	110.8	89. 5	100.6	91.1	107.3	88.6	111.7	88.9	112, 0	88.8	109.5	89.

Table 2.—Indexes of Union Hourly Wage Rates and Weekly Hours in Each Building Trade, 1907 to 1939—Continued

Year	(porta	ineers ble and ting)	Gla	ziers	Granite	cutters	Lat	hers	Marble	setters	Mosa terr wor	azzo
	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hour
907					36, 6	102.5			38. 4	102.6		-
908					36.8	102.3			38.8	102.6		
909					37.4	102.3			39.0	101.5	*****	
910					37.6	101.9			39. 5	101.3		
911					37.7	101.6			39.9	100.9		*****
912					38.1	101. 2	39. 4	104.0	40.1	100.9		
913	43.0	104. 1			40.1	100.0	40.3	104.0	42.7	100: 9		
914	43.6	104.0			40.3	100.4	41.0	104.0	43. 2	100.7		
15	43.6	103.5			40.5	100.4	41.5	103. 5	43.6	100.7	******	
16	44.1	103.1			42.2	100.3	42.7	103.5	43.8	100.5	37.7	100
17	46, 5	102. 4			43, 8	100.3	44.4	103.0	43.8	100.4	39.7	10
18	53. 2	100.8	45.9	101.6	52. 2	100.3	47.9	103.0	46. 1	100.4	42.9	10
019		100.3	49. 1	101.6	61.7	100.3	53. 3	102.7	51. 2	100.0	46.1	10
20	75. 5	99.8	71.0	101. 2	76.0	100.3	76.0	102. 1	67.7	100.0	68. 2	10
21	76.7	99.4	72. 2	101.6	83.7	100.1	77.2	101.9	68.8	100.1	69.4	10
22	72. 2	99. 1	72.4	101.7	83.5	99.3	72.5	102.0	67.4	100.1	67.4	10
23	79.8	98.7	76.7	101. 2	85, 1	99.9	80. 1	102.3	76. 2	100.1	69.0	10
24	84.8	98.7	80.9	101. 2	85.8	100. 2	86.4	102. 1	79.7	100.1	81.5	10
25	88, 5	99.0	90.0	100, 8	86.8	100.3	94. 2	101.8	81.4	100.1	85.7	10
26 27	93. 4	99. 2	91. 2	101. 2	97.7	100.1	96.6	101.5	91.0	100.1	87.5	10
	96, 4	100.8	97.4	101. 5	97.1	100. 3	100.5	101.0	92.9	100.0	91.1	9
28	100. 4	99.7	98.5	101.1	98. 2	100.3	100.8	100.5	93.4	100.0	95.3	9
29	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	10
30	107.7	95.1	104.6	96.8	105. 1	95. 2	104.3	94.3	100.3	94.7	104.7	1 5
31	107. 7 100. 7	93.7	105.3	95 1	105. 2	94.4	103.7	93.8	100.8	93.0	105.6	9
33	99. 6	92. 6 91. 7	88. 2 88. 0	92. 9 92. 9	94. 2	94.8	93. 1 89. 7	93.3	92.3 89.2	92.0 91.9	97.2	1 3
34	101. 4	89.7	93. 2	88 1	90. 6	92. 1	92.1	87.5	88.8	90.9	89.5	1
									1			1
35	103. 1	89, 2	94.1	87.5	90.5	92. 1	93. 1	87.4	89.4	90.9	90.8	1
36	104. 2	89.7	95.5	87.8	90.5	91.5	95. 5	86.5	89.9	90.8	91.1	1 8
	112.6	89.5	104.6	87.9	91.0	91.9	101.8	87.7	95.1	90.8	95.4	1 5
)38	116. 0 117. 4	89.3	112. 2 113. 0	86.3 86.1	96.3	85, 3 85, 3	112. 7 116. 4	86. 1 85. 4	103. 2 103. 5	90.8	106.0	8
700	111.3	00. 2	110.0	50, 1	01.1	00. 0	110. 4	00.1	100.0	90. 8	107.5	8
	Pair	nters	Plasterers		Plumbers and gas fitters		Roofers— composition		Roofers—slate and tile		Sheet-meta workers	
907	27.5	114.1	39, 9	108.8	37.8	104. 7					33.8	10
008	30. 5	112.3	39.8	108. 3	38. 2	104.8					34. 5	10
09	32.6	110.7	40.1	108.3	38.8	104.8		******			34.7	10
10	34.6	109.3	40, 5	108. 2	39. 1	104.6		*******			35.7	1
11	35, 3	108.6	40.8	108.8	41.4	104.3					36.8	1
12	35.7	108.5	41.6	107. 5	41.6	103.5					37.6	1
13	37.3	107. 9	42.0	107.5	43.0	103. 5				*****	39.3	1
14	38.5	107.6	42.2	107.4	43.6	103.1	36. 2	103.7	37.0	104.0	40.7	1
15	38.7	107.6	42.4	106. 9	43.9	103.1	37.1	103.7	38. 4	104.0	41.3	1
16	42.3	106. 9	43.9	105.8	44.3	102, 6	37.4	103.7	39, 5	103.6	42,0	1
17	43.6	106.8	45. 2	105.7	45, 8	102.5	39, 5	103.0	42.1	101.8	43.8	1
18	48.1	106.3	47.6	105.4	50.6	101.6	44.8	102, 5	46.1	101.8	51.3	
19	56.3	106.1	54. 9	105.4	57. 2	101.3	49.8	102.5	52.5	101.5	56.6	
20	76. 7	103.0	71.7	105. 2	74.0	101.3	70.8	102, 5	67. 9	101.5	75.9	1
	78.9	103.1	75.6	104. 9	77.4	101.1	74.2	100.6	73.9	101.4	78.7	1
	73.8	103.9	72.7	105, 0	71.9	101. 1	71.0	100.6	70.7	101.3	73.0	
22		103.6	81.0	105. 5	79.4	101.1	71.9	100.6	78.8	101.6	78.6	
22 23	81.0	400 0	90.6	105.6	86.6	101.1	83. 3	100.6	87.3	101.2	86.3	
22 23 24	85.3	103.5	00.4		88, 4	101.1	85, 8	100.6	91.3	101. 2	89. 2	
22  23  24  25	85.3 90.0	103.8	92.1	105. 3	OF O	101.1	93, 3	100.6	94.3	101. 2	95.3	
22 23 24 25 26	85. 3 90. 0 95. 4	103. 8 103. 4	98. 9	102. 2	95. 2	100.0		100.6	98.8	101. 2	98.2	
22 23 24 25 26 27	85, 3 90, 0 95, 4 98, 6	103. 8 103. 4 103. 0	98. 9 101. 0	102. 2 101. 8	97.2	100.9	95, 9					1
22 23 24 25 25 26 27	85. 3 90. 0 95. 4 98. 6 100. 2	103. 8 103. 4 103. 0 100. 3	98. 9 101. 0 101. 2	102. 2 101. 8 100. 9	97. 2 99. 2	100.9	98.1	100. 5	99.0	101. 2	96.3	
22	85. 3 90. 0 95. 4 98. 6 100. 2 100. 0	103. 8 103. 4 103. 0 100. 3 100. 0	98. 9 101. 0 101. 2 100. 0	102. 2 101. 8 100. 9 100. 0	97. 2 99. 2 100. 0	100. 9 100. 0	98. 1 100. 0	100. 5 100. 0	100.0	100.0	100.0	1
122   123   124   125   126   127   128   129   130	85. 3 90. 0 95. 4 98. 6 100. 2 100. 0 105. 6	103. 8 103. 4 103. 0 100. 3 100. 0 98. 9	98. 9 101. 0 101. 2 100. 0 105. 0	102. 2 101. 8 100. 9 100. 0 97. 7	97. 2 99. 2 100. 0 103. 9	100, 9 100, 0 95, 4	98. 1 100. 0 106. 0	100. 5 100. 0 96. 1	100. 0 103. 1	100. 0 95. 7	100.0 104.6	1
122   123   124   125   126   127   128   129   130   131	85. 3 90. 0 95. 4 98. 6 100. 2 100. 0 105. 6 106. 1	103. 8 103. 4 103. 0 100. 3 100. 0 98. 9 98. 0	98. 9 101. 0 101. 2 100. 0 105. 0 104. 7	102. 2 101. 8 100. 9 100. 0 97. 7 97. 0	97. 2 99. 2 100. 0 103. 9 105. 1	100. 9 100. 0 95. 4 94. 1	98. 1 100. 0 106. 0 106. 7	100. 5 100. 0 96. 1 94. 9	100. 0 103. 1 103. 5	100. 0 95. 7 94. 1	100. 0 104. 6 106. 2	1
122   123   124   124   125   126   127   128   129   130   130   131   132   132   128   132	85, 3 90, 0 95, 4 98, 6 100, 2 100, 0 105, 6 106, 1 89, 6	103, 8 103, 4 103, 0 100, 3 100, 0 98, 9 98, 0 97, 9	98. 9 101. 0 101. 2 100. 0 105. 0 104. 7 87. 1	102. 2 101. 8 100. 9 100. 0 97. 7 97. 0 95. 2	97. 2 99. 2 100. 0 103. 9 105. 1 91. 4	100. 9 100. 0 95. 4 94. 1 93. 7	98. 1 100. 0 106. 0 106. 7 93. 2	100. 5 100. 0 96. 1 94. 9 93. 9	100. 0 103. 1 103. 5 89. 9	100. 0 95. 7 94. 1 94. 1	100.0 104.6 106.2 92.1	1
22 23 24 25 26 27 28 29 30 31 31 32	85, 3 90, 0 95, 4 98, 6 100, 2 100, 0 105, 6 106, 1 89, 6 87, 8	103, 8 103, 4 103, 0 100, 3 100, 0 98, 9 98, 0 97, 9 97, 7	98. 9 101. 0 101. 2 100. 0 105. 0 104. 7 87. 1 83. 7	102. 2 101. 8 100. 9 100. 0 97. 7 97. 0 95. 2 97. 2	97. 2 99. 2 100. 0 103. 9 105. 1 91. 4 90. 6	100. 9 100. 0 95. 4 94. 1 93. 7 93. 3	98. 1 100. 0 106. 0 106. 7 93. 2 91. 2	100. 5 100. 0 96. 1 94. 9 93. 9 95. 1	100. 0 103. 1 103. 5 89. 9 87. 7	100. 0 95. 7 94. 1 94. 1 94. 1	100. 0 104. 6 106. 2 92. 1 89. 4	1
22 23 24 25 26 27 28 29 30 31 31 32 33 34	85, 3 90, 0 95, 4 98, 6 100, 2 105, 6 106, 1 89, 6 87, 8 86, 4	103. 8 103. 4 103. 0 100. 3 100. 0 98. 9 98. 0 97. 9 97. 7 85. 6	98. 9 101. 0 101. 2 100. 0 105. 0 104. 7 87. 1 83. 7 84. 6	102. 2 101. 8 100. 9 100. 0 97. 7 97. 0 95. 2 97. 2 93. 1	97. 2 99. 2 100. 0 103. 9 105. 1 91. 4 90. 6 91. 4	100. 9 100. 0 95. 4 94. 1 93. 7 93. 3 92. 4	98. 1 100. 0 106. 0 106. 7 93. 2 91. 2 93. 0	100. 5 100. 0 96. 1 94. 9 93. 9 95. 1 92. 6	100. 0 103. 1 103. 5 89. 9 87. 7 87. 2	100. 0 95. 7 94. 1 94. 1 94. 1 93. 8	100. 0 104. 6 106. 2 92. 1 89. 4 89. 7	1
122   123   124   124   125   126   127   126   127   128   129   130   131   132   133   134   135	85, 3 90, 0 95, 4 98, 6 100, 2 100, 0 105, 6 106, 1 89, 6 87, 8 86, 4	103. 8 103. 4 103. 0 100. 3 100. 0 98. 9 98. 0 97. 9 97. 7 85. 6 85. 5	98. 9 101. 0 101. 2 100. 0 105. 0 104. 7 87. 1 83. 7 84. 6 85. 6	102. 2 101. 8 100. 9 100. 0 97. 7 97. 0 95. 2 97. 2 93. 1 91. 6	97. 2 99. 2 100. 0 103. 9 105. 1 91. 4 90. 6 91. 4 92. 8	100, 9 100, 0 95, 4 94, 1 93, 7 93, 3 92, 4 91, 8	98. 1 100. 0 106. 0 106. 7 93. 2 91. 2 93. 0 95. 6	100. 5 100. 0 96. 1 94. 9 93. 9 95. 1 92. 6 92. 5	100. 0 103. 1 103. 5 89. 9 87. 7 87. 2 89. 5	100. 0 95. 7 94. 1 94. 1 94. 1 93. 8 92. 6	100. 0 104. 6 106. 2 92. 1 89. 4 89. 7 90. 4	1
122	85. 3 90. 0 95. 4 98. 6 100. 2 100. 0 105. 6 106. 1 89. 6 87. 8 86. 4 86. 7 91. 1	103. 8 103. 4 103. 0 100. 3 100. 0 98. 9 98. 0 97. 9 97. 7 85. 6 85. 5 85. 9	98. 9 101. 0 101. 2 100. 0 105. 0 104. 7 87. 1 83. 7 84. 6 85. 6 86. 1	102. 2 101. 8 100. 9 100. 0 97. 7 97. 0 95. 2 97. 2 93. 1 91. 6 90. 1	97. 2 99. 2 100. 0 103. 9 105. 1 91. 4 90. 6 91. 4 92. 8 95. 2	100. 9 100. 0 95. 4 94. 1 93. 7 93. 3 92. 4 91. 8 90. 6	98, 1 100, 0 106, 0 106, 7 93, 2 91, 2 93, 0 95, 6 96, 2	100. 5 100. 0 96. 1 94. 9 93. 9 95. 1 92. 6 92. 5 93. 1	100, 0 103, 1 103, 5 89, 9 87, 7 87, 2 89, 5 90, 2	100. 0 95. 7 94. 1 94. 1 94. 1 93. 8 92. 6 93. 4	100. 0 104. 6 106. 2 92. 1 89. 4 89. 7 90. 4 92. 2	1
1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935	85, 3 90, 0 95, 4 98, 6 100, 2 100, 0 105, 6 106, 1 89, 6 87, 8 86, 4	103. 8 103. 4 103. 0 100. 3 100. 0 98. 9 98. 0 97. 9 97. 7 85. 6 85. 5	98. 9 101. 0 101. 2 100. 0 105. 0 104. 7 87. 1 83. 7 84. 6 85. 6	102. 2 101. 8 100. 9 100. 0 97. 7 97. 0 95. 2 97. 2 93. 1 91. 6	97. 2 99. 2 100. 0 103. 9 105. 1 91. 4 90. 6 91. 4 92. 8	100, 9 100, 0 95, 4 94, 1 93, 7 93, 3 92, 4 91, 8	98. 1 100. 0 106. 0 106. 7 93. 2 91. 2 93. 0 95. 6	100. 5 100. 0 96. 1 94. 9 93. 9 95. 1 92. 6 92. 5	100. 0 103. 1 103. 5 89. 9 87. 7 87. 2 89. 5	100. 0 95. 7 94. 1 94. 1 94. 1 93. 8 92. 6	100. 0 104. 6 106. 2 92. 1 89. 4 89. 7 90. 4	1

TAB

1907. 1908. 1909. 1910. 1911. 1912. 1913.

Table 2.—Indexes of Union Hourly Wage Rates and Weekly Hours in Each Building Trade, 1907 to 1939—Continued

Building

saic and rrazzo orkers

Hours

103, 9 103, 9 100, 2 100, 2 100, 2

100.2 100.2 100.3 100.3 100.2 100.2 99.9

99.9 100.0 94.5 93.6 89.8 91.0 90.9

90.3 89.4 90.0 87.7 87.7

-metal

105, 4 105, 3 105, 3 105, 3 105, 0 103, 7 103, 5

103. 4 103. 2 102. 8 102. 7 101. 6 101. 2

100.8

100. 8 100. 7 100. 7 100. 7 100. 7 100. 7 100. 4

100.1 100.0 96.3 94.7 93.3 93.2 91.9

92.0 91.9 92.0 90.1 90.1

	Sign p	ainters	sprin	n and akler ters	Stone	cutters	Stone	nasons		etural- vorkers	Tile l	ayers
Year	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage	Hours
1907 1908 1909 1910 1911			33. 8 34. 2 38. 9 36. 1 37. 3 37. 9	105. 9 105. 9 105. 6 105. 0 104. 9 104. 2	38. 1 38. 2 38. 2 38. 4 38. 5 38. 6	101. 2 101. 2 101. 2 101. 2 101. 2 100. 9	34. 7 35. 2 35. 3 35. 6 36. 0 36. 4	106. 8 106. 8 106. 8 105. 2 104. 5 104. 5	31. 8 34. 7 37. 2 39. 5 40. 5 41. 2	108. 1 105. 9 104. 5 103. 4 103. 2 102. 1	42.7	102.8
1913	39. 9 40. 1 40. 1 40. 9 42. 7 46. 7 56. 1	106. 7 106. 3 106. 0 106. 1 105. 6 105. 5 105. 4 105. 3 105. 4	39. 3 40. 0 40. 9 41. 7 43. 3 47. 3 53. 2 70. 2 71. 1	103.8 102.5 102.5 102.2 102.1 101.1 101.0 100.9 100.8	39. 6 41. 1 41. 4 41. 8 43. 8 46. 7 55. 5 72. 7 74. 7	100. 8 100. 8 100. 8 100. 4 100. 3 100. 3 100. 3 100. 2	37.6 38.7 39.1 39.7 41.2 45.2 50.7 70.7 72.4	104. 4 104. 3 104. 1 104. 0 104. 0 103. 4 103. 4 103. 5	42. 5 43. 3 43. 3 44. 0 46. 6 53. 4 60. 1 76. 2 77. 6	101. 7 101. 5 101. 5 101. 2 101. 0 100. 7 100. 5 100. 5	44.8 45.0 45.3 45.9 48.2 49.6 54.1 72.8 72.2	102. 3 101. 9 101. 4 101. 1 101. 1 100. 7 100. 4 100. 5
1922 1923 1924 1925 1926 1927	77. 8 84. 0 95. 7 96. 7	105. 4 103. 4 101. 6 101. 6 103. 7 101. 8	69, 5 72, 9 83, 6 88, 0 95, 3 98, 0	100.8 100.8 100.8 100.8 100.7 100.5	71. 7 78. 2 84. 0 87. 5 95. 4 95. 1	100. 2 100. 1 100. 1 100. 3 100. 1 100. 1	67. 4 79. 7 84. 5 86. 1 94. 9 96. 1	103, 4 103, 4 103, 1 103, 1 103, 3 103, 1	70. 5 75. 1 85. 0 85. 9 92. 4 99. 0	100. 5 100. 5 100. 5 100. 2 100. 5 100. 5	71. 0 77. 6 88. 1 90. 2 94. 6 99. 0	100. 3 100. 6 100. 6 100. 6 100. 6
1928	100. 0 99. 9 99. 8 90. 1 83. 2	101. 7 100. 0 99. 1 98. 1 97. 6 97. 8 95. 1	99, 4 100, 0 104, 9 105, 5 90, 9 88, 2 89, 2	100. 5 100. 0 95. 5 94. 5 93. 6 93. 1 92. 5	95. 5 100. 0 100. 7 101. 0 93. 7 84. 7 85. 1	100. 2 100. 0 96. 9 96. 4 94. 3 94. 3 93. 0	97. 3 100. 0 101. 5 102. 0 90. 5 84. 5 84. 4	103. 0 100. 0 96. 6 94. 9 94. 5 93. 8 93. 4	99. 2 100. 0 105. 5 106. 5 92. 3 91. 3 92. 5	100. 4 100. 0 96. 9 95. 8 93. 4 93. 1 91. 8	98. 9 100. 0 104. 5 105. 6 91. 1 88. 3 88. 3	100. 2 100. 0 94. 8 93. 6 92. 6 92. 4 86. 2
1935	85. 6 87. 6 96. 8 97. 7	93. 1 92. 9 92. 9 92. 0 91. 9	90. 7 93. 7 98. 8 111. 4 112. 2	92. 2 92. 4 92. 5 87. 6 88. 0	85. 1 86. 3 88. 3 96. 1 96. 5	92. 7 92. 8 92. 8 91. 7 91. 8	84. 2 85. 2 94. 1 102. 1 102. 4	93. 3 93. 3 93. 3 90. 2 90. 2	93, 2 95, 6 104, 4 113, 2 114, 5	90. 7 90. 6 90. 2 89. 5 89. 4	89. 0 90. 7 97. 1 106. 4 106. 5	86. 2 86. 1 89. 8 89. 8

Year		lding	(ma	earriers sons' iers)		terers'	constr	vator uctors' pers	set	rble ters' pers	sprink	m and der fit- helpers	Tile l	layers' pers
	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours
1907	35. 0 35. 2 35. 3 36. 7 36. 8 37. 2 38. 8	108. 5 108. 5 108. 1 105. 5 105. 5 105. 5	33. 1 33. 2 33. 3 33. 8 34. 1 34. 3 34. 8	110. 5 110. 5 110. 1 109. 2 108. 6 107. 8 107. 8	34. 1 35. 6 36. 0 36. 2 36. 2 36. 6 37. 5	106. 6 106. 2 105. 9 105. 9 105. 8 105. 3 105. 3			35. 8 37. 9	100.5	26. 4 26. 8 26. 9 29. 1 29. 3 30. 2 31. 0	103. 1 103. 0 102. 8 101. 8 101. 7 101. 6 101. 3	36. 1 36. 8	103. 0 102. 5
1914	39. 2 39. 4 41. 2 45. 5 53. 4 60. 5 87. 7	105. 2 105. 2 104. 6 103. 5 103. 0 101. 1 100. 0	35. 2 35. 4 36. 5 40. 7 47. 5 55. 6 80. 8	106. 4 106. 4 106. 3 106. 3 105. 9 105. 7	38. 3 38. 4 39. 4 42. 1 48. 5 55. 3 80. 1	105. 4 105. 4 104. 4 104. 2 104. 2 103. 8 103. 8	37. 5 37. 8 38. 8 40. 9 43. 6 52. 9 74. 1	102.9 102.2 102.2 101.7 101.7 100.9 100.7	38. 1 38. 1 38. 1 40. 6 42. 5 48. 6 82. 0	100. 1 100. 1 100. 1 100. 1 100. 1 100. 0 100. 0	31. 6 32. 5 33. 0 35. 1 40. 5 48. 6 70. 4	102. 0 102. 0 101. 7 101. 7 100. 3 100. 2 100. 2	37. 1 38. 4 39. 8 40. 8 42. 1 51. 0 83. 5	102. 5 100. 9 100. 6 99. 8 99. 8 99. 5
1921	88. 2 82. 8 84. 4 93. 9 89. 7 98. 7 99. 1	100. 0 99. 3 100. 0 99. 7 99. 8 100. 0 100. 2	81. 2 67. 3 73. 5 76. 8 85. 8 93. 5 95. 7	105. 7 105. 9 105. 9 105. 8 105. 7 105. 8 105. 8	82.7 72.6 80.0 86.0 91.7 97.1 98.0	103. 4 103. 4 103. 5 103. 4 103. 3 99. 9 99. 8	77. 5 73. 8 77. 3 85. 2 89. 2 96. 1 99. 0	100, 5 100, 6 100, 6 100, 6 100, 5 100, 5	81. 9 76. 2 82. 3 89. 2 84. 6 93. 9 93. 3	100. 2 100. 2 100. 2 100. 2 100. 2 100. 2 100. 0	72. 2 74. 1 78. 7 87. 2 89. 7 95. 0 99. 3	100, 2 100, 3 100, 3 100, 3 100, 3 100, 2 100, 4	84. 4 79. 3 81. 1 88. 3 90. 8 98. 4 99. 5	99. 6 99. 6 100. 5 100. 5 100. 5 100. 5
1928	99. 5 100. 0 105. 5 103. 9 89. 4 84. 2 87. 3	100. 1 100. 0 98. 1 97. 0 93. 6 93. 2 89. 1	95. 8 100. 0 103. 8 103. 5 85. 8 84. 7 90. 3	105. 8 100. 0 99. 3 98. 8 96. 6 96. 1 94. 3	99. 6 100. 0 106. 0 105. 6 87. 6 82. 5 84. 8	100. 1 100. 0 97. 4 96. 6 96. 3 94. 7 91. 8	100. 9 100. 0 105. 4 105. 7 96. 9 88. 9 88. 4	100. 5 100. 0 96. 2 94. 7 94. 7 92. 5 91. 8	94. 3 100. 0 101. 7 101. 8 93. 2 90. 7 90. 9	100. 1 100. 0 95. 9 94. 2 93. 8 94. 0 92. 3	101. 4 100. 0 109. 3 109. 3 94. 3 91. 6 91. 9	100. 0 100. 0 92. 1 91. 8 91. 7 91. 6 91. 1	101. 5 100. 0 108. 5 108. 5 95. 8 91. 4 91. 5	100. 8 100. 0 93. 6 92. 6 91. 4 91. 8
1935	88. 6 96. 2 105. 3 112. 9 113. 6	89. 0 89. 5 89. 7 89. 3 89. 2	87. 4 92. 1 99. 1 109. 1 109. 4	94. 2 94. 0 94. 3 93. 2 92. 9	86. 2 88. 0 95. 8 108. 1 109. 0	90. 7 89. 2 89. 2 85. 1 84. 8	88. 6 89. 5 91. 8 104. 5 107. 9	91. 5 92. 1 91. 7 91. 1 86. 8	91. 5 91. 6 97. 0 105. 4 105. 9	92. 3 92. 2 92. 2 92. 2 92. 2		91. 1 91. 5 91. 8 82. 3 82. 2	94. 6 96. 0 101. 2 111. 6 111. 9	76. 3 76. 3 81. 0 81. 0

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Five journeyman trades had slight increases in their indexes of weekly hours between 1938 and 1939. Eight of the journeyman hour indexes and five helper and laborer indexes declined during the year. None of the hour index changes except those of the elevator constructors and their helpers amounted to as much as 1 percent of the 1938 values. The elevator constructors' hour index, however, decreased 2.4 percent from 91.7 in 1938 to 89.5 in 1939, while their helpers' index dropped from 91.2 in 1938 to 86.8 in 1939, a decrease of 4.8 percent. In relation to the base year, the hour index for tile layers' helpers (81.6) declined more than that of any other trade. The hod carriers' index (92.9) had the least decline. Among the journeyman trades the index for granite cutters (85.3) declined most and that for slate and tile roofers (92.2) decreased least from the 1929 level.

Since data for boilermakers, machinists, paperhangers, and rodmen were not collected in 1929, it is impossible to present index numbers for these crafts comparable to those for the other crafts. The changes over the previous year, as shown in comparable quotations for each year in which data have been collected for these trades, are as follows:

#### Percentage Change From Previous Year

1937	1938	1939
Boilermakers:		
Wage rates +2. 4	+10.4	+0.6
Hour scales	-5.0	0.0
Machinists:		
Wage rates +14.7	+6.5	+.2
Hour scales 4	5	1
Paperhangers:		
Wage rates	+1.7	+.5
Hour scales	6	+.2
Rodmen:		
Wage rates	+9.8	+1.0
Hour scales	0. 0	1

## Changes in Union Scales Between 1938 and 1939 2

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Increased wage rates were reported in 372, or 14.6 percent, of the 1939 quotations which were comparable with 1938 (table 3). The great bulk of the comparable quotations, 2,176 of the total of 2,556, indicated that no change had been made during the past year. The decreases in wage rates reported were negligible, there being only 8 reductions among all quotations obtained.

Approximately 1 in every 10 union members in the building trades participated in the benefits of the increased scales. Proportionately the increases were about evenly divided between the journeymen and the helpers and laborers. Some increases were reported in every trade group, but no one trade had an outstanding volume of raises.

The bricklayers had only 7 increases among 75 quotations, but they led all the other journeyman trades in the proportion of their total membership affected (29 percent). Four other journeyman trades, the elevator constructors, granite cutters, lathers, and sheetmetal workers, reported that their raises benefited over 20 percent of their total memberships. In 8 of the 28 journeyman classifications, however, over 95 percent of the total memberships had no changes in their wage scales during the year.

The elevator constructors' helpers had 11 increases among 87 comparable quotations, exceeding all of the trade groups in the proportion of members affected (42.1 percent). The plumbers' laborers reported only 4 raises in 29 quotations, but those increases applied to 22.2 percent of the members in this classification. The distribution of the wage rate changes and of the members affected are shown in table 3.

<sup>&</sup>lt;sup>2</sup> Certain anomalies enter into a comparison of average rates between 2 years when such averages reflect not only the actual rates provided for in the agreements but the number of union members for that year in each local union covered by the reported rates. By and large, it would be expected that a general increase in actual rates would be accompanied by a corresponding increase in the average rate paid to union members, but if union membership increases most (or decreases least) in the lower-paid crafts or in areas with less-than-average rates, the average of the rates paid to all union members may not increase correspondingly or may even show a decrease. Conversely, the average rate may increase in spite of a downward swing in actual rates, if union membership declines sufficiently in the lower-paid crafts or in areas where lower-than-average rates are paid.

Because the averages do not accurately reflect changes from year to year, no table comparing 1938 and 1939 averages is included in this report. For the trend of actual union rates, the table of indexes (table 1) should be consulted, since these are so computed as to eliminate the effect of fluctuating memberships at various rates. The current averages, on the other hand, best serve for comparison of the general level of wage rates between trades, or between cities and regions at the time the survey was made.

TAB

Table 3.—Number of Changes in Union Wage-Rate Quotations and Percent of Members

Affected, June 1, 1939, Compared With June 1, 1938

	Num- ber of quota-		er of quo		Percen	Percent of union mem. bers affected			
Trade	tions com- parable with 1938	In- crease	De- crease	No change	In- crease	De- crease	No chan		
All building trades	2, 556	372	8	2, 176	10.4	0.2	8		
Journeymen	2,079	294	4	1, 781	10.3	(1)	8		
Asbestos workers	52	7		45	7.6		9:		
Boilermakers	36	6		30	7.3	*******			
Bricklayers	75	7		68	29. 0	*******	9		
Darpenters	96	7		89	- 3.0	*******	1		
Dement finishers	70	9		61	4.5		1		
Electricians—inside wiremen	89	16		73	7.5		1		
						*******	1		
Clevator constructors	113	13		100	28. 9				
Engineers, portable and holsting	239	48	2	189	12.5	(1)			
laziers	65	10		55	13.8	******			
Franite cutters	30	10		20	24. 4	*******			
athers	83	16		67	21.1				
Machinists	30	4	1	25	3. 2	1.2			
Marble setters	64	5	1	58	4.5	. 2			
Mosaic and terrazzo workers	56	7		49	17.4				
Painters	102	16		86	14.8				
Paperhangers	59	11		48	7.1				
Plasterers		13		60	12.1				
Plumbers and gas fitters	75	6		69	13.0				
Podmon		13		1		******			
Rodmen	04		******	51	12.1	******	1		
Roofers, composition		8		61	4.9				
Roofers, slate and tile	45	4	******	41	7.2				
Sheet-metal workers	61	9		52	21.5				
Sign painters		3		63	3.4		1		
team and sprinkler fitters	96	21		75	9.2		1		
tonecutters	70	6		64	8.3				
tonemasons	66	6		60	3.6				
structural-iron workers		11		60	15.1				
Tile layers		2	*****	62	1.1				
Helpers and laborers	477	78	4	395	11.0	1.0			
Building laborers		10	1	58	9.6	.6	1		
Composition roofers' helpers		2		23	3, 1				
Elevator constructors' helpers	87	11		76	42.1				
Hod carriers (masons' tenders)	73	10	2	61	10.8	4.1	1		
Marble setters' helpers	42	6	-	36	6.7	4. 1			
Plasterers' laborers	65	12	1	52	11.4	.2			
Plumbers' laborers		4	1	25	22, 2	.2			
Steam and sprinkler fitters' helpers	1 49	1				******	*		
Tile levers' believe	43	18		25	10.5	******			
Tile layers' helpers	. 44	5		39	2.7	******	*		

1 Less than a tenth of 1 percent.

Over half of the wage raises reported in 1939 were for less than 10 percent, and nearly one-third represented increases between 10 and 15 percent.

Of the total membership benefited by increased scales, less than one-tenth had their rates raised by 15 percent or more. The greatest percentage increase reported was that for rodmen in Little Rock, Ark., which was an advance from \$0.65 to \$1.00 per hour. Table 4 shows the distribution of the wage-rate increases according to the percent of increase.

Table 4.—Number of Increases in Union Wage-Rate Quotations and Percent of Members
Affected, by Percent of Increase, June 1, 1939, Compared With June 1, 1938

	Num	in in	f quo	tation es of-	s sho	wing	Perce	nt of t	otal n	nem be	ers aff	ected
Trade	Less than 10 per- cent		15 and un- der 20 per- cent	20 and un- der 25 per- cent	25 and un- der 30 per- cent	30 per- cent and over	Less than 10 per- cent		and un- der 20 per- cent	20 and un- der 25 per- cent	25 and un- der 30 per- cent	30 per- cen and ove
All building trades	193	109	13	25	19	13	7. 2	2.3	0. 2	0.4	0.2	0.
Journeymen	138	96	10	21	17	12	7.2	2. 1	. 3	.3	. 2	
Asbestos workers Bricklayers Bricklayers Barpenters Benent finishers Electricians, inside wiremen Elevator constructors Engineers, portable and hoisting Blaziers Branito cutters Lathers Machinists Marble setters Mosaic and terrazzo workers Painters Paperhangers Plumbers and gas fitters Rodmen Roofers, composition Roofers, slate and tile Sheet-metal workers Steam and sprinkler fitters Stonecutters Stonecutters Structural-iron workers Tile layers	34 43 55 122 199 66 22 10 55 44 88 22 23 33	1 2 9 1 1 1 1 1 3 3 1 4 4 6 6 6 2 2 7 7 3 3 2 2 3 5 3 3 3 5 5 6 6 3 3 3 5 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	]	2 1 2 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	26.9 2.1 1.37 28.7 5.6 11.8 2.1 11.7 2.8 11.7 2.7 11.7 5.5 11.8 11.8 11.8 11.8 11.8 11.8 11.8	2.5 1.8 2.5 1.7 1.2 5.5 9.4 3.9 2.5 1.7	.7 .1 .6 1.2 .1 .2 .1	1. 5 1 1 1 4 1 1 2 2 2 2 3 8	.2 .3 .3 .9.7 .6 .4 .5 .3	(1) 2. 1.
Helpers and laborers	. 53	5 13	1	3 4	1 :	2	1 6.6	3. (	.1	1. 1	.5	2 (1
Building laborers Composition roofers' helpers Elevator constructor's helpers Hod earriers (masons' tenders) Plasterers' helpers Plumbers' laborers Eteam and sprinkler fitters' helpers File layers' helpers	1	7 2 2 3 1 2 2 1 2 2				1	9. 3. 9.	5 1. 1 1. 1 1. 1 1. 1 1.	9	20.6	8 -1	5

1 Less than a tenth of 1 percent.

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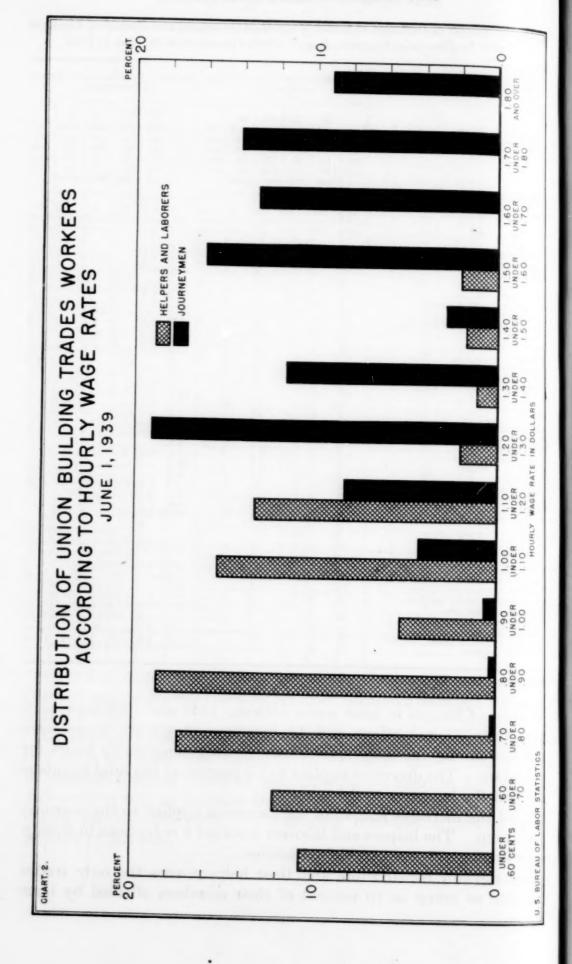
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Hours.—Changes in hour scales between 1938 and 1939 were very few. Only 51 reductions and 14 increases in weekly hours were reported among the 2,555 quotations showing comparable hours for both years. The decreases applied to 1.6 percent of the total membership and the increases to 0.4 percent.

All of the increases and 43 of the decreases applied to the journey-man group. The helpers and laborers reported 8 reductions in weekly hours among 477 comparable quotations.

The elevator constructors and their helpers were the only trades that had as many as 10 percent of their members affected by hour



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changes. Reductions in New York, Newark, and Duluth affected 19.6 percent of the journeyman elevator constructors and 32.7 percent of their helpers.

The distributions of the changes in weekly hours between 1938 and 1939 and the percent of members affected are shown in table 5.

Table 5.—Number of Changes in Union Hour Quotations, and Percent of Members Affected, June 1, 1939, Compared With June 1, 1938

	Num- ber of quota-		er of quot			of union rs affects	
Trade	tions com- parable with 1938	In- crease	De- crease	No change	In- crease	De- crease	No change
All building trades	2, 555	14	51	2, 490	0.4	1. 6	98.
Journeymen	2, 078	14	43	2, 021	. 5	1.5	98.
Asbestos workers	52			52			100.
Boilermakers	36		1	35		. 2	99.
Bricklayers	75	1		74	. 4		99.
Carpenters	96		4	92		. 4	99.
Cement finishers	70	*******	2	68		.4	99.
Electricians, inside wiremen	89		3	86		2.4	97.
Elevator constructors.	113		3	110		19.6	80.
Engineers, portable and hoisting	239		5	234		. 5	99.
Glaziers	65		2	63		2.1	97.
Franite cutters	30		-	30		2. 1	100.
Athers	82		1	81		8.0	92.
Machinists	30		2	28		1. 2	98.
Marble setters	64	*******	-	64		1.2	100.
Mosaic and terrazzo workers	56			56			100.
Painters.	102	2	2	98	.8	3.9	95.
Paperhangers	59	1	2	56	2.9	1.6	95.
Plasterers			2	71	2.0	1.0	99.
Plumbers and gas fitters	75	1	5	69	2.7	2.2	95.
Rodmen			1	63	2. 1	.6	99.
Roofers, composition		1	1	68	.3	.0	99.
Roofers, slate and tile	45	1		44	.9		99.
Sheet-metal workers		1	******	60	. 9		99.
Sign maintant	66	2	3	61	3.5	4 5	99.
Sign paintersSteam and sprinkler fitters	96	1	4	91	2.8	4.5 1.0	96.
Stepanistors	70	2	4	68			99.
Stonecutters	66	1		65	.4		99.
Stonemasons Structural-iron workers	71	1	1	70	.0	. 2	99.
Tile layers			1	64		. 2	100.
			~~~~~				
Helpers and laborers	477		8	469		1.7	98.
Building laborers	69		1	68		. 9	99
Composition roofers' helpers	25			25			100
Elevator constructors' helpers	87		3	84			67
Hod carriers (masons' tenders)	73		2	71		2.1	
Marble setters' helpers	42			42			_ 100
Plasterers' laborers	65		1	64		2.3	
Plumbers' laborers	29			. 29			. 100
Steam and sprinkler fitters' helpers	43		1	42		5	
Tile layers' helpers	44		1	44			900

## Average Union Wage Rates, 1939

The average union rate per hour for all building trades in the 72 cities studied on June 1, 1939, was \$1.364. The journeyman average was \$1.468 and that of the helpers and laborers \$0.866 (table 6).

U. S. BUREAU OF LABOR STATISTICS

The plasterers' average of \$1.686 was the highest for any trade. The bricklayers (\$1.662), lathers (\$1.625), and boilermakers (\$1.602) were next in line. Nine additional journeyman trades had average

hourly rates above \$1.50 per hour. The lowest journeyman average was \$1.27 for composition roofers.

The elevator constructors' helpers had the highest average, \$1.144 per hour, among the helper and laborer trades. Four other helper and laborer trades had averages of over \$1 per hour. The lowest average

was that of the building laborers, \$0.79 per hour.

Among the journeyman trades the hourly wage rates ranged from \$0.60 for composition roofers in Louisville to \$2.50 for bucket-hoist operators on superstructure work in New York City. Generally the journeyman rates ranged between \$1.10 and \$1.80 per hour. Scales above \$1.80 were reported for 9.2 percent of the journeyman members and scales below \$1.10 for 5.4 percent. Only 1.1 percent of the journeymen had rates of less than \$1 per hour. The rates of \$2 and over applied to a considerable number of workers, 5.1 percent of the total journeymen, but they occurred in only 10 of the 72 cities covered—Birmingham, Butte, Chicago, Cleveland, Newark, New York, Pittsburgh, St. Louis, San Francisco, and Washington, D. C. In many cases these high rates were not the scales for the general work of the trades, but applied to specialty work such as spray painting or work under air pressure. Sixteen of the trades had some quotations in these higher brackets.

Sixteen journeyman trades had over half their total membership in wage brackets above \$1.50 per hour. Five trades had no scales exceeding \$1.80 per hour. On the other hand, 11 trades had no rates of less than \$1. The boilermakers and structural-iron workers reported no rates below \$1.20 and the marble setters reported none below \$1.10.

The helper and laborer rates ranged from \$0.40 per hour for building laborers in Atlanta, El Paso, Jackson (Miss.), Jacksonville, and Nashville, and for plumbers' laborers in Dallas, to \$1.517 per hour for plasterers' tenders in Brooklyn. The proportions of the helper and laborer membership having the various scales were not definitely concentrated but were widely distributed over the entire range of rates. Over half of the total, however, had rates of \$0.85 per hour or higher, and over 35 percent had rates of \$1 or more.

The building laborers and the hod carriers were the only trades which did not have a considerable proportion of their membership in the \$1.20 and over bracket. A majority of the elevator constructors' helpers, plasterers' tenders, and steam- and sprinkler-fitters' helpers had hourly rates of \$1 or better. The elevator constructors' helpers had no scales lower than \$0.75 per hour. Only the building laborers, hod carriers, and plasterers' tenders reported rates of under \$0.60 for any substantial proportion of their members.

The average rates by trades and the distribution of the memberships reported, according to hourly wage rates, are shown in table 6.

Table 6.—Distribution of Union Members in the Building Trades, by Hourly Wage Rates, June 1, 1939

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	Aver-	Perc	entag	e of u	nion j	ourne	ymen wer	whos	e rate	s (in	cents)	per l	our
Trade	age rate per hour	Un- der 100	100 and un- der 110	110 and un- der 120	120 and un- der 130	130 and un- der 140	140 and un- der 150	and un- der 160	160 and un- der 170	and un- der 180	180 and un- der 190	190 and un- der 200	200 and over
Journeymen	\$1.468	1. 1	4.3	8. 4	19. 1	11.6	2.8	16. 1	13. 2	14. 2	1.4	2.7	5. 1
Asbestos workers	1. 602 1. 662 1. 401 1. 441	5. 4 .8 .4 .6	2.1 .9 5.9 2.9 3.4 .8	2. 5 12. 0 3. 2 11. 0 2. 1	13. 6 7. 9 2. 0 25. 9 35. 1 13. 0 12. 2	34. 2 9. 4 4. 6 11. 8 9. 4 12. 5 13. 8	1.5 3.7 4.4 1.1 12.2	7.3 42.2 27.4 8.3 9.5 13.9 25.7	8. 5 5. 9 13. 9 11. 4 15. 7 10. 7 8. 2	9. 6 6. 6 20. 6 20. 2 17. 7 12. 9 4. 3	2. 4 1. 2 1. 1 20. 7	28. 0 25. 6	12. 5 1. 1 19. 8
Glaziers	1. 279 1. 625 1. 459 1. 586 1. 442 1. 365	.7 4.8 .1 .8 2.3 1.6	19. 1 . 8 4. 4	4.8 18.8 17.0 2.0 .5 .2 1.7 14.0 12.2	10. 6 17. 3 5. 7 7. 2 31. 7 5. 0 29. 2 23. 5 33. 2	10. 8 8. 9 50. 0 7. 5 4. 1 15. 9 19. 9 8. 8 14. 0	3. 1 3. 2 4. 2 3. 1	24.3 5.2 .7 23.8 7.4 12.3 15.8 23.9 3.0	10. 2 2. 0 .1 13. 9 46. 5 59. 6 8. 3 21. 6 27. 5	9. 0 	1.5	~~~~	2. 8 14. 2
Plasterers Plumbers and gas fitters Rodmen Roofers, composition Roofers, slate and tile Sheet-metal workers Sign painters Steam and sprinkler fitters	1. 686 1. 526 1. 470 1. 270 1. 397 1. 427 1. 568	.2	. 8 1. 1 2. 7 15. 3 9. 4 3. 3 5. 9 1. 9	2. 2 8. 0 8. 5 7. 2 8. 3 5. 6 1. 6	6. 3 20. 2 23. 8 21. 9 18. 8 25. 0	9. 4 11. 3 10. 2 11. 1 13. 3 25. 0 8. 6 19. 5	. 5 9. 3 2. 5 3. 4 2. 0 7 4. 4 4. 6	18. 2 21. 6 15. 9 5. 8 12. 2 10. 4 12. 5 19. 6	16. 4 1. 9 2. 3 11. 3 14. 0 2. 0 8. 3 5. 8	16. 9 16. 5 32. 3 8. 6 12. 9 8. 0 24. 6 25. 0	5. 7 16. 8 9. 3		30. 2 15. 7 2. 3 1. 4
Stoneutters. Stonemasons. Structural-iron workers. Tile layers.	1. 364 1. 544 1. 596	10. 3		7. 5		4.9 4.2 14.7	5. 9 10. 6 2. 0 3. 1	8. 2 26. 7 24. 1 19. 8	15. 0 7. 7 17. 8 42. 0	1. 1 13. 0 18. 5	7. 9	9. 2 8. 6 9. 5	.3
	Aver-	Perc	entage	e of ur	nion b	elpers	and l	abore		ose rat	tes (in	cents	) per
Trade	age rate per hour	Un- der 60	60 and un- der 65	65 and un- der 70	70 and un- der 75	75 and un- der 80	80 and un- der 85	85 and un- der 90	90 and un- der 95	95 and un- der 100	100 and un- der 110	and un- der 120	120 and over
Helpers and laborers 3	\$0.866	10.7	8. 5	3.7	9.9	7.6	6.8	11.9	3. 5	1.8	15.4	13.4	6.8
Building laborers Elevator constructors' helpers Hod carriers (masons' tenders) Marble setters' helpers Plasterers' laborers Steam and sprinkler fitters'	. 790 1. 144 . 886 1. 038 1. 094	8. 1 1. 0 5. 0	3.0 2.2 1.7	4. 2 3. 3 1. 5 1. 5	11.3	6. 1 . 9 7. 0 9. 5 2. 7	1.7 6.8 5.9	4.8 11.0 4.7	4. 2 10. 0	11. 4 5. 1 8. 6	15.6	13. 4 22. 1 7. 1	35. 8 2. 5 33. 4
helpers Tile layers' helpers	1. 109 1. 001	1.3	2. 4 1. 4	1.4	4.1								

<sup>1</sup> Less than a tenth of 1 percent.

<sup>2</sup> Includes also plumbers' laborers and composition roofers' helpers, not shown separately because of the small number of quotations obtained for these trades.

#### AVERAGE RATES IN EACH CITY

Averages of the combined journeyman rates and of the combined helper and laborer rates in each city, grouped according to population, are presented in table 7. The averages used were weighted according to the number of members in each local union covered by the reported rates. Thus the averages reflect not only the specific rates provided

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for in the union agreements, but also the number of persons presumably benefiting from these rates.3

Not all the trades had effective union scales in all the cities. This was especially true among the helper and laborer trades. Average rates of helpers and laborers are shown only for those cities in which there were effective scales for a considerable number of building laborers and at least one other helper trade.

Six cities had averages of over \$1.50 per hour for the journeyman trades. New York City's average was \$1.76; Newark, with an average of \$1.699, was second; Chicago was third with \$1.653; while Washington, Pittsburgh, and St. Louis followed with averages of \$1.59, \$1.559, and \$1.528, respectively. Butte, although one of the cities in the smallest population group, had the seventh highest average for journeymen (\$1.494).

Union organization varies considerably more in the helper and laborer trades than in the journeyman trades among the different cities. In many of the smaller cities no union scales were reported for the more unskilled occupations. This tended to raise their averages higher than they would be had all of the helper and laborer trades been included. Likewise, since no city averages are given in the absence of union rates for at least one helper trade and a substantial number of laborers, a number of cities are missing entirely from the listing for groups 4 and 5. The remaining list thereby tends to include only those cities which have higher rates for their least skilled trades (table 7).

Table 7.—Average Union Hourly Wage Rates in the Building Trades, by Cities and Population Groups, June 1, 1939

City and population group	Average hourly rate	City and population group	A verage hourly rate
Journeymen		Journeymen-Continued	
Population group 1 (over 1,000,000):		Population group 3 (250,000 to 500,000):	
New York, N. Y	\$1.760	Newark, N. J.	\$1.69
Chicago, Ill	1.653	Washington, D. C.	1.56
Average for group 1	1.597	Cincinnati, Ohio	
Detroit, Mich	1. 347	Toledo, Ohio	1.45
Philadelphia, Pa.	1. 280	Denver, Colo	1.42
Los Angeles, Calif Population group 2 (500,000 to 1,000,000):	1. 192	Kansas City, Mo	
Pittsburgh, Pa.	1, 559	Indianapolis, Ind	
St. Louis, Mo	1. 528	Rochester, N. Y	
Cleveland, Ohio	1. 435	Seattle, Wash	1
Boston, Mass	1. 401	Minneapolis, Minn	
Average for group 2	1.395	St. Paul. Minn	1.2
Buffalo, N. Y.	1. 352	Columbus, Ohio	1.2
Baltimore, Md	1. 314	Houston, Tex	1.2
San Francisco, Calif	1. 309	Louisville, Ky	
Milwaukee, Wis	1. 217	Birmingham, Ala	1.2

<sup>\*</sup> While a comparison of average rates between cities where averages include the influence of the membership factor may be somewhat misleading where membership is unusually large or small in comparison to the same trade in other cities, a weighted average of this kind is obviously more realistic than a simple average of specific rates. In the latter case a wage rate in a trade including half a dozen members would be given the same importance as that of a trade including several thousand members.

Table 7.—Average Union Hourly Wage Rates in the Building Trades, by Cities and Population Groups, June 1, 1939—Continued

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City and population group	Average hourly rate	City and population group	Average hourly rate
Journeymen-Continued		Helpers and laborers—Cont'd.	
Population group 3—Continued.		Population group 2—Continued.	
Providence, K. I.	\$1, 234	Milwaukee, Wis	\$0.883
Portland, Oreg	1. 200	Pittsburgh, Pa	863
Dallas, Tex	1, 198	Average for group 2	861
Memphis, Tenn	1. 195 1. 167	Buffalo, N. Y	. 690
New Orleans, La	1, 126	Baltimore, Md.	. 632
Population group 4 (100,000 to 250,000):	1. 120	Population group 3 (250,000 to 500,000): Newark, N. J	1, 073
Dayton, Ohio	1, 421	Seattle, Wash	. 92
Peoria, Ill	1.388	Kansas City, Mo	. 90
Youngstown, Ohio	1. 353	Minneapolis, Minn	. 881
Spokane, Wash		Cincinnati, Ohio	836
Springfield, Mass		Toledo, Ohio	. 818
Des Moines, Iowa Erie, Pa	1, 265 1, 264	St. Paul, Minn	. 80
Rock Island (Ill.) district 1	1. 258	Portland, Oreg. Indianapolis, Ind	. 79
Scranton, Pa	1. 258	Denver, Colo	. 78
South Bend, Ind	1, 243	Washington, D. C.	.74
El Paso, Tex		Average for group 3	71
Average for group 4	1.232	Rochester, N. Y	709
Oklahoma City, Okla		Providence, R. I.	. 67
New Haven, Conn	1. 206	Memphis, Tenn	. 65
Reading, Pa	1, 194	Columbus, Ohio	. 65
San Antonio, Tex.	1. 192	Houston, Tex New Orleans, La	. 58
Worcester, Mass	1. 187	Louisville, Ky	. 556
Salt Lake City, Utah	1. 161	Dallas, Tex.	. 520
Duluth, Minn	1. 144	Atlanta, Ga	47
Nashville, Tenn	1. 138	Birmingham, Ala	. 46
Omaha, Nebr	1. 134	Population group 4 (100,000 to 250,000):	
Richmond, Va.	1. 116	Spokane, Wash	1.00
Wichita, Kans Jacksonville, Fla	1.088 1.047	Peoria, Ill.	. 87
Norfolk, Va	1. 028	Worcester, Mass Salt Lake City, Utah	.80
Population group 5 (40,000 to 100,000):	1.020	South Bend, Ind	.76
Butte, Mont	1.494	Des Moines, Iowa	- 76
Charleston, W. Va	1.218	New Haven, Conn	. 75
Madison, Wis	1. 213	Scranton, Pa	72
Phoenix, Ariz	1. 211	Rock Island (Ill.) district 1	. 72
Average for group 5	1. 165 1. 148	Average for group 4	.71
Manchester, N. H	1. 118	Dayton, Ohio	.67
Little Rock, Ark	1,063	Voungetown Ohio	67
Charlotte, N. C.	1.022	Duluth, Minn	. 64
Charleston, S. C.	1.014	Springherd, Mass	. 00
Portland, Maine	. 990	Erie, Pa	. 61
York, Pa	. 945	Oklahoma City, Okla	. 58
Helpers and laborers		San Antonio, Tex	. 58
Hospers and thousers		El Paso, Tex Grand Rapids, Mich	. 52
Population group 1 (over 1,000,000):		Nashville, Tenn	. 48
New York, N. Y.	1.152	Jacksonville, Fla	. 44
Chicago, Ill.	1. 039	Population group 5 (40,000 to 100,000):	
Average for group 1	1.011	Butte, Mont	. 89
Detroit, Mich.	. 776	Phoenix, Ariz	.74
Los Angeles, Calif	.715	York, Pa. Average for group 5.	.72
Population group 2 (500,000 to 1,000,000):	.000	Madison, Wis	68
St. Louis, Mo	. 971	Manchester, N. H	. 66
Cleveland, Ohio	. 922	Portland, Maine	. 64
San Francisco, Calif	. 910	Charleston, W. Va	. 54
Boston, Mass	. 889	Jackson, Miss	. 45

<sup>&</sup>lt;sup>1</sup> Includes Rock Island, Ill., Davenport, Iowa, and Moline, Ill.

## Wage Rates for Special Types of Work

Most of the building trades' agreements provide only one rate of wages, which applies to all work of the specified crafts regardless of the type of construction involved. Penalty rates for work con-

sidered particularly dangerous or difficult, such as spray painting, work on high scaffolds, or work under air pressure, are sometimes provided.

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Agreements for elevator constructors generally specify a 10-percent differential in favor of maintenance or repair work. Similar maintenance differentials are occasionally found in the agreements for a few other crafts, particularly electricians, plumbers, and carpenters. These differentials are sometimes based upon the full weekly employment of the workman and may not be invoked on part-time work. This principle of a differential in favor of full-time employment is applied in a few of the agreements for engineers, which provide full-time weekly rates of approximately 10 percent under the broken-time hourly rates, applying to all types of work.

Home building.—Differentials favoring dwelling construction, as opposed to public and commercial work, are contained in a few agreements. The electricians reported such differentials in 10 cities, the carpenters in 4 cities, and the plasterers in 3 cities. The asbestos workers, cement finishers, lathers, painters, plumbers, roofers, sheetmetal workers, steam fitters, and tile layers each had dwelling differentials

entials in one or two cities.

The most extensive development of dwelling differentials was reported in Philadelphia, where the Building Trades Council has executed a general agreement with the Home Builders' Association of Philadelphia and Suburbs, which covers the "operative building" of dwelling units. It provides wage scales for the trades involved at rates generally about 20 percent below those specified in the regular commercial agreements. By the definition in the agreement, these provisions are restricted to "the erection or alteration, upon ground purchased by operative builders, of buildings, anticipating the sale of the completed structures at a profit." Building work under contract awarded after competitive bidding is specifically excluded from the benefits of this agreement.

Most of the local unions that are customarily concerned with dwelling construction in Philadelphia have ratified this agreement and are participating in the work under its terms. Generally the participating unions have placed restrictions upon their members who are permitted to work under this agreement, customarily either classifying such members within the local or organizing them into subordinate locals. These members then are prohibited under normal conditions from accepting work on any jobs which are covered by the regular commercial agreements.

### Overtime Rates

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are ring nate ions Double time was specified as the initial overtime rate in agreements covering 63.3 percent of the total building-trades membership in the cities surveyed. Time and one-half was reported for 35.9 percent of the membership. A small number of reports showed time and one-third or specific monetary rates which were not multiples of the regular rates. In 41 instances no provision was made in the agreements for any penalty rate for overtime. Most of these cases were in localities where oral agreements prevailed and it was explained that overtime work was so seldom required that no consideration of a penalty rate had been necessary. Two other agreements prohibited overtime work entirely.

The overtime sections of the agreements frequently provided that the initial overtime rate should apply only for a limited number of hours after the regular quitting time, and that a further increased scale should apply thereafter. This was particularly true of those agreements which specified time and one-half as the initial overtime rate. These agreements frequently required the payment of double time for work continuing after 6 p. m. and also for any overtime work on Saturday.

Double time was more generally specified for excess hours among the journeyman trades than among the helpers and laborers. In the journeyman group the double time rate applied to 70.9 percent of the membership, while 28.6 percent had a time and one-half rate. The helpers and laborers had a time and one-half rate for 70.7 percent of their members and double time for 27.1 percent.

A slight modification of the overtime provisions was allowed under some of the helper and laborer agreements whereby serving laborers were permitted to begin work before the regular starting time in order to have the materials prepared and distributed before the journeymen were ready to start work. The limited periods allowed for this preparatory work were not usually classed as overtime nor made subject to penalty rates.

The distribution of the initial overtime rates and the percentages of the memberships to which each applied are shown in table 8.

Table 8.—Overtime Rates Provided in Building-Trades Union Agreements, June 1, 1930

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	Num	ber of c	quotati ertime	ons sho rates of	wing	Percentage of union member having initial overtime rate of—					
Trade	Time and one- half	Dou- ble time	Other pen- alty scales	Over- time pro- hib- ited	No pen- alty rate spec- ified	Time and one- half	Dou- ble time	Other pen- alty scales	Over- time pro- hib- ited	No per alt rat spe ifle	
All building trades	1, 254	1, 419	13	2	41	35. 9	63. 3	0.1	(1)	-	
Journeymen	958	1, 208	13	2	19	28.6	70. 9	. 2	(1)	-	
Asbestos workers	27	31				37.9	62.1	-		1	
Boilermakers		31				2.0	98.0		~~~~		
Pricklavare	22							*****			
Bricklayers		54					85.0	1	1		
Carpenters	43	59					81.5				
Cement finishers	46	25	1			55.4	44. 0	. 6			
Electricians, inside wiremen	38	52	1 1		1		63. 6	. 2			
Elevator constructors	25	90				10.3	89.7		1		
Engineers, portable and hoisting	119	133	1		2	33.5	65. 7	2		140	
Plaziers	50	14	9		-	64.3	35. 1	6			
Granite cutters	14	18				19.4	80.6	. 0			
		72								-	
Lathers	13				6	4.2	90.8				
Machinists	16	23					89.8	*****			
Marble setters	24	41					82.4				
Mosaic and terrazzo workers	28	31				45.5	54.5			1	
Painters	89	17	2	1	1	59.7	39, 0	. 5	.3		
Paperhangers	51	10				88.0	11.8		1 .2		
Plasterers	93	52			1		87. 2			1	
Plumbers and gas fitters	26	50	1			11.6	88. 2	.2			
Rodmen	26	66					98. 1	. 2			
Poofers composition	I PO					1.9				-	
Roofers, composition	56	20	1			76. 7	22. 2	.7		-	
Roofers, slate and tile	35	19	2			54. 2	40.0	5.6		-	
Sheet-metal workers	12	51				9.0	91.0				
Sign painters	57	7	1		1	55.7	43.7	.3			
Steam and sprinkler fitters	29	67	1			31.5	68. 4	.1		1	
Stonecutters	53	18			4	32.4	61. 2			1	
Stonemasons	19	48					88. 1				
Structural-iron workers	19	73					99. 0				
Pila lavore											
File layers		33				32.0	68. 0				
Helpers and laborers	296	211			22	70.7	27.1			4	
Building laborers	62	8			6	87.3	10.1				
composition roofers' helpers	23	5				79.6	12.5				
Elevator constructors' helpers	14	76				6.6	93. 4				
Hod carriers (masons' tenders)	57	17				74.2	23. 4				
Marble setters' helpers	30	17					66.8				
lasterers' laborers	42	24									
lumbare laborer	42						64. 2				
'lumbers' laborers	23	11				22.3	76. 4			-	
	4 40	1 475									
team and sprinkler fitters' helpers 'ile layers' helpers	10 35	13			3	7.7	92. 3 53. 6				

<sup>1</sup> Less than a tenth of 1 percent.

## Union Hours, 1939

The average maximum workweek for all building trades was 38.3 hours. The journeyman trades averaged 38.1 hours per week and the helper and laborer trades averaged 39.5 hours (table 9).

The plasterers' average of 35.3 hours per week was the lowest of any trade. The highest average among the journeyman trades was that of the engineers, 40.2 hours. This high average was due to the fact that a number of the agreements for engineers specify a 48-hour week for street or road work.

The average for steam and sprinkler fitters, 35.7 hours per week, was the lowest in the helper and laborer group. The building laborers had the highest average of all the trades, 40.5 hours per week.

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The basic workweek for 68.8 percent of the building-trades members was 40 hours. Thirty-five hours was specified for 17.5 percent of the total membership, and 9.5 percent were limited to 30 hours per week. Only 3.7 percent were allowed 44 hours and less than half of 1 percent were permitted to work 48 hours in any week without overtime.

The 40-hour week predominated for both the journeyman and the helper and laborer groups. The unskilled and semiskilled trades, however, had longer workweeks for 17 percent of their members as compared with 1.4 percent of the journeyman group. Less than 40hour weeks prevailed for 29.2 percent of the journeymen and for 16.5 percent of the helpers and laborers.

Table 9.—Distribution of Union Members in Each Building Trade, by Weekly Hours, June 1, 1939

Trade	Average	Percer	ntage of t	Percentage of union members whose hou per week were—									
	per week	30	32	35	40	44	48						
All building trades	38. 3	9. 5	0.1	17. 5	68. 8	3.7	0.4						
Journey men	38. 1	9.9	.1	19. 2	69. 4	1.0	. 4						
Asbestos workers	38.7	14.7		2.3	76.3	6.7							
Boilermakers	38.4	2.1		28. 1	69.8								
Bricklayers	38.4	1.6		29.5	67. 9	1.0							
Carpenters	38.7	2.2		21.6	75. 5	.7							
Cement finishers	38.9	1.2		22.9	73.0	2.5	.4						
Electricians, inside wiremen	37. 6	22.6		4.0	72.5	. 6	.3						
Elevator constructors		1.4		19. 9	63. 1	15, 6	. 0						
Engineers, portable and hoisting		4.5		1.8	83.3	2.4	8.0						
Glaziers.				32.3	65. 2	1.4							
Granite cutters		1.1				1. 4							
		00.0		57.1	42.9								
		29.6		1.4	68.5	. 2	. 3						
Machinists	39.9			4.6	93. 1	2.3							
Marble setters	39. 9	. 4		1.3	98.1	. 2							
Mosaic and terrazzo workers	38. 8	1.1		23. 1	74. 9	. 9							
Painters	36.4	18.8		35. 0	45.7	. 5							
Paperhangers	36. 7	28.4		10.4	60.1	1.1							
Plasterers	35. 3	42.4	4.0	3. 2	48.9	1.5							
Plumbers and gas fitters		17.6		7.2	74.6	. 6							
Rodmen		1.7		2.2	95.6	. 5							
Roofers, composition	39.6	.7		1 11.4	82.9	3.6	1.4						
Roofers, slate and tile	39. 5	. 5		12.4	83.3	3.0	. 8						
Sheet-metal workers	38. 9	2.2		17.8	79.9	.1							
Sign painters	38. 2			40.7	53.9	5.4							
Steam and sprinkler fitters	37.8	19.4		5.8	74.4	. 4							
Stonecutters		2012	1	11. 2	86.8	2.0							
Stonemasons	38.8	1.1		22.5	76. 2	. 2							
Structural-iron workers	39.0	4.0		11.5	84.0	.5							
Tile layers		1.3		1.4	96. 6	.7							
Helpers and laborers 3	39. 5	7.3		9. 2	66. 5	16.4	3.6						
Building laborers	40.5	.8		8.7	65. 5	24.2	1,8						
Elevator constructors' helpers	38.4	1.1		32.5	54.8	11.6							
Hod carriers (masons' tenders)	39. 3	1.7		16.5	74.4	7.1	3, 3						
Marble setters' helpers	39.9	1.0		.9	97.7	.4							
Plasterers' laborers	36.4	35. 4		4.4	56. 5	3.5	Indiana.						
Steam and sprinkler fitters' helpers	35, 7	40. 3		5.8	53. 7	3. 3							
Tile layers' helpers	40.0	1.1		1.2	95. 9	. 5	1.3						

<sup>1</sup> Includes 3/10 of 1 percent having a 36.9-hour scale, amounting to less than 1/10 of 1 percent in the journey-

man totals.

Includes also plumbers' laborers and composition roofers' helpers, not shown separately because of the small number of quotations obtained for these trades.

One-tenth of 1 percent of the building laborers and 2/10 of 1 percent of the hod carriers had 49-hour scales. amounting to a tenth of 1 percent of the group totals.

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A majority of the members in each of the trades, except the granite cutters, painters, and plasterers, had 40-hour scales. Every trade reported some members as having 35-hour scales and nearly all reported a few 30-hour and 44-hour scales. The plasterers had the greatest proportion of members (42.4 percent) with 30-hour scales, and the building laborers had the largest proportion (24.2 percent) with 44-hour scales. Relatively few 48-hour weeks were reported. Only the engineers, composition roofers, and tile layers' helpers had as many as 1 percent of their members working on a 48-hour basis.

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## WAGES AND HOURS IN BRITISH COLUMBIA, 1938

IN 1938 the average weekly wage for adult male industrial employees in British Columbia was \$26.70—an increase of \$0.06 as compared with the weekly wage reported for 1937, but \$2.50 below that for 1929, according to the annual report of the department of labor of that Province for the year 1938.

The average wage of adult males in the week of greatest employment ordinarily means a full week's wage. In 1938 these wages ranged from \$13.00 in the cigar and tobacco industry to \$34.19 in the printing and publishing and \$38.95 in jewelry manufacturing.

Many industries were employing substantial numbers of men in 1938 at less than \$19.00, food products reporting 29.39 percent of 10,182 adult males in that wage group; contracting, 11.26 percent of 11,650 men; and the lumber industries, 6.47 percent of 26,257 men. Only 2.20 percent of the 8,783 men engaged in metal mining, however, were reported as receiving such low wages.

The average weekly working hours for all industrial employees covered in 1938 were 46.84, as compared with 47.25 in the preceding

year, and 48.25 in 1929.1

Of 96,188 employees reported by employers, 88.67 percent worked 48 hours or less per week in 1938, 5.29 percent between 48 and 54 hours per week, and 6.04 percent, over 54 hours per week. In five industries—coast shipping, food-products manufacture, metal mining, oil refining, and smelting—the average weekly hours in 1929 were over 51, reaching almost 54 in metal mining. In 1938 in only 1 industry were the average weekly hours 50 or more—metal mining, in which 50.3 hours were reported.

The table following gives average weekly wages of adult males for the week of greatest employment, and average weekly hours of work, by industries, in British Columbia for 1929, 1937, and 1938.

<sup>&</sup>lt;sup>1</sup> Figures for 1929 from British Columbia, Department of Labor, Annual Report for the Fiscal Year Ended December 31, 1932, Victoria, 1933. (See Monthly Labor Review, November 1937, p. 1230.)

Average Weekly Wages and Hours of Work of Adult Males in British Columbia, 1929, 1937, and 1938

Industry group	Avera	wage	week's	Aver	erage weekly hours	
	1938	1937	1929 1	1938	1937	1929 1
Breweries	\$27.42	\$26. 18	\$27.70	44, 53	44, 60	46, 77
Builders' materials	22, 82	22, 31	28. 04	44. 63	45, 15	46, 96
igars and tobacco	13.00	15, 50	26, 58	224,00	42.73	44, 40
oal mining	. 28. 20	27, 46	30, 18	47. 93	47, 91	48. 03
Coast shipping	. 32.93	31.99	32, 84	48.54	46, 93	51, 05
Contracting	25, 81	25, 61	30, 57	43, 85	44. 11	45, 16
Explosives and chemicals	24, 20	24, 58	24. 61	47. 20	46, 70	46.04
Food products	23, 70	23, 85	26, 56	47, 43	49.05	51. 01
Parment making	23. 15	22, 97	26, 68	43. 22	44, 39	44. 87
House furnishings	20, 80	22, 25	26, 74	44, 33	45, 61	45, 53
lowelry manufacturing	38 95	34. 60	36, 61	42.01	44. 30	44, 24
aundries, cleaning and dyeing.	23.33	22. 89	23, 16	44. 14	45, 20	46, 62
eather and fur-goods manufacturing	22. 23	21. 23	29. 03	44. 31	45, 33	46. 70
umber industries:	26.50		26, 54	77. 01	20.00	20. 10
Logging	20.00	20.01	20.01	48, 38	48, 49	47. 31
Logging railways				49. 51	50. 91	48. 61
Lumber dealers				44. 67	45, 77	47, 63
Planing mills				48, 37		
Sawmills					48. 45	49. 14
Shingle mills				47. 99	48. 23	49. 12
tal mining	20 40	20 04	05 04	47. 46	46.65	47.86
tal trades	05 00	30. 34	35. 24	50. 30	50. 25	53, 96
refining	25, 09	24. 77	29. 50	45.00	45. 46	45.87
aint manufacturing		27. 92	30, 50	48. 81	46.70	51. 61
inting and publishing	22.78	23.08	25. 58	44. 11	44. 16	45.00
ulp and paper manufacturing	34. 19	33. 69	40. 81	43. 55	44. 37	45. 44
mp and paper manufacturing	26. 36	26.75	27.87	44. 29	47.95	48. 35
ipbuilding		27.88	30. 25	44. 05	43.85	44. 15
elting	. 24.80	25. 08	33. 09	47.95	47.92	52.72
eet railways, gas, water, power, etc.	27.78	27, 20	30, 70	45. 23	45. 36	44.61
od manufacturing (not elsewhere specified)	. 22, 68	21.97	25, 49	46, 29	46, 72	47, 03

<sup>1929</sup> figures from British Columbia Department of Labor, annual report for the year ended, Dec. 31, 1932, Victoria, 1933.

1 As given in report—probably should be 42.00.

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## Labor Turn-Over

## LABOR TURN-OVER IN MANUFACTURING, AUGUST 1939

A FURTHER increase in the number of workers hired or rehired and a sharp decrease in the lay-off rate in factories was indicated by reports on labor turn-over received by the Bureau of Labor Statistics for August. The accession rate at 5.06 per 100 employees was higher than for any month since October 1938. With the exception of February 1939, fewer lay-offs were reported than in any month since June 1937. The quit rate increased from 0.70 per 100 employees to 0.82, and the discharge rate from 0.12 to 0.14. Total separations declined from 3.36 in July to 3.01 in August.

As compared with August of last year, the quit and discharge rates were considerably higher. The lay-off and total separation rates were lower. The number of accessions was slightly lower than a

year ago.

In August, voluntary separations (quits) accounted for approximately 27 percent of the total separations. In July, 21 percent of the total were reported as quits. Discharges represented approximately 4 percent of the total in both months. Lay-offs constituted 69 percent of the total in August and 75 percent in July.

## All Manufacturing

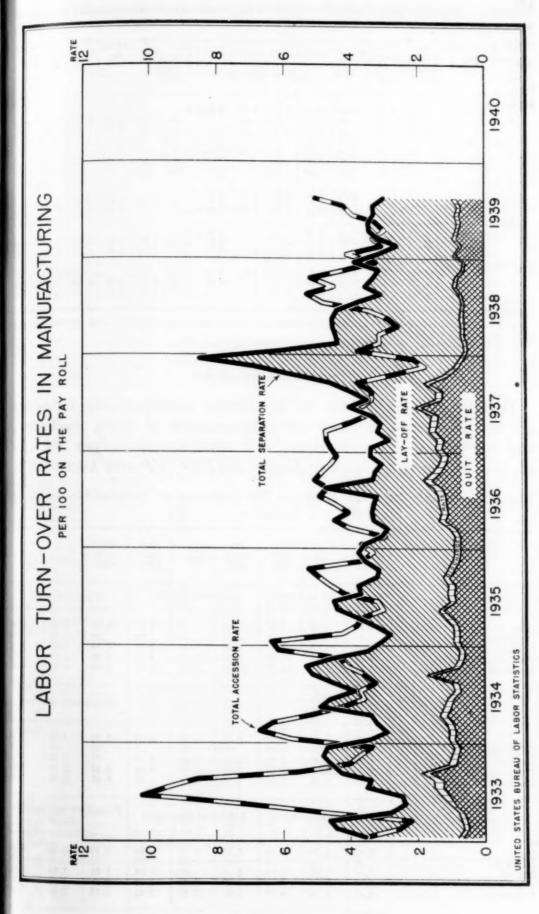
The Bureau of Labor Statistics' survey of labor turn-over covers approximately 5,500 representative manufacturing establishments, which in August employed nearly 2,350,000 workers. The rates represent the number of changes in personnel per 100 employees on the pay rolls during the month.

The rates shown in table 1 are compiled from reports received from representative plants in 144 industries. In the 30 industries for which separate rates are shown (see table 2) reports were received from representative plants employing at least 25 percent of the

workers in each industry.

Table 1 shows the total separation rate classified into quit, discharge, and lay-off rates and the accession rate for each month of 1937 and 1938 and the first 8 months in 1939 for manufacturing as a whole. The average of the monthly rates for 1937 and 1938 are also presented.

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Table 1.—Monthly Labor Turn-Over Rates in Representative Factories in 144 Industries!

Class of turn-over and year	Janu- ary	Feb- ruary		April	May	June	July	Au- gust	Sep- tem- ber	Octo- ber	No- vem- ber	De- cem- ber	A
Separations: Quits													
1939	0.85	0.64	0.82	0.76	0.68	0.73	0.70	0.82					
1938	. 52	. 49	. 61	. 59	. 62	. 61	. 59	. 65	0.82	0.78	0.60	0 50	
1937	1. 27	1, 19	1. 43	1.38	1. 37	1.89	1. 25	1. 23	1. 59	1.05	.72		
Discharges			-			21.00	21 200		2.00	*100		. 60	1
1939	. 10	. 10	. 13	. 10	. 13	. 12	.12	. 14					
1938	. 11	. 11	. 11	. 10	. 13	. 11	.09	. 10	. 12	.12	. 10	. 09	
1937	. 21	. 22	. 24	. 23	. 21	. 10	. 21	. 19	. 19	. 19	. 16	. 14	
Lay-offs 2												1	1
1939	2. 24	1.87	2. 23	2.60	2.67	2.46	2. 54	2.05	****				
1938	5.45	3. 79	3.74	3.85	3.82	3.69	3. 13	2. 33	2.62	2. 40-			
1937	1.90	1.44	1.53	1.48	1.79	1.94	2.06	2. 57	2.84	4. 45	5.99	7.77	4
Total	0 10	0.01	0.10	0 40	0 40	0.01	0.00	0.01				1	1
1939	3. 19	2.61	3. 18	3. 46	3, 48	3. 31	3. 36	3.01	0 #0	0.00			
1938	6.08	4. 39	4. 46	4. 54	4. 57	4.41	3.81	3.08	3.56	3.30	3. 14		
Accessions:	3. 38	2,85	3. 20	3.09	3. 37	4.02	3. 52	3. 99	4.62	5. 69	6.87	8.51	4
1939	4.09	3.06	3, 34	2,95	3, 29	3, 92	4.16	5.06					
1938	3.78	3, 13	3, 13	2. 58	2.84	3. 44		5. 29	4, 51	5. 19	4. 24	2 0	-
1937	4.60	4.71	4.74	4.04	3. 56	3, 69	3, 36	3, 36	3, 78	2.84	1.79		

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## Selected Industries

Detailed turn-over rates for 30 selected manufacturing industries are listed in table 2, which gives the number of quits, discharges, and lay-offs, total separations, and total accessions per 100 employees in reporting firms in August and July 1939 and August 1938.

Table 2.—Monthly Turn-Over Rates (per 100 Employees) in Specified Manufacturing Industries

			Inausti	ries						
Class of rates	Au- gust 1939	July 1939	Au- gust 1938	Au- gust 1939	July 1939	Au- gust 1938	Au- gust 1939	July 1939	Au- gust 1938	
	Automo	biles and	bodies	Auto	mobile p	arts	Boo	ts and sh	1008	
Quit	0. 61 . 11 6. 06 6. 78 35. 72	0. 66 . 08 24. 02 24. 76 6. 35	0. 34 . 05 9. 97 10. 36 20. 50	0. 66 . 12 2. 51 3. 29 16. 65	0. 59 . 22 9. 68 10. 49 6. 92	0. 44 . 09 3. 79 4. 32 18. 20	0. 87 . 15 1. 84 2. 86 2. 19	0. 84 .11 1. 09 2. 04 4. 03	0.98 .16 1.02 2.16 3.59	
	Brick, tile, and terra cotta				Cement		Cigars and eigarettes			
Quit Discharge Lay-off Total separation Accession	0.77 .34 2.45 3.56 5.55	0. 64 . 17 3. 46 4. 27 3. 89	0. 46 . 12 4. 05 4. 63 7. 34	0. 37 . 09 2. 18 2. 64 1. 56	0. 39 . 06 1, 60 2, 05 3, 63	0. 36 . 10 5. 78 6. 24 3. 10	1. 43 . 23 . 78 2. 44 6. 25	1. 08 . 07 1. 50 2. 65 2. 61	1. 15 . 14 . 33 1. 84 5. 75	
	Cotton	m anufa	cturing	Electr	ical macl	hinery	Foundries and ma			
Quit Discharge Lay-off. Total separation Accession.	1. 53 . 26 1. 37 3. 16 4. 49	1. 28 .19 1. 27 2. 74 4. 49	1. 13 . 19 1. 78 3. 10 6. 17	0.75 .08 1.15 1.98 3.85	0. 61 . 06 . 66 1. 33 3. 25	0. 53 . 07 1. 34 1. 94 3. 41	0. 49 .10 1. 68 2. 27 3. 12	0. 40 .07 1. 34 1. 81 2. 65	0.3 2.3 2.8 3.6	

<sup>&</sup>lt;sup>1</sup> The various turn-over rates represent the number of quits, discharges, lay-offs, total separations, and accessions per 100 employees.

<sup>2</sup> Including temporary, indeterminate, and permanent lay-offs.

TABLE 2.—Monthly Turn-Over Rates (per 100 Employees) in Specified Manufacturing Industries—Continued

Class of rates	Au- gust 1939	July 1939	Au- gust 1938	Au- gust 1939	July 1939	Au- gust 1938	Au- gust 1939	July 1939	Au- gust 1938
	Furniture			Glass			Hardw a 16		
QuitDischargeLay-offTotal separationAccession	0. 87 . 24 1. 68 2. 79 5. 62	0. 76 . 21 1. 47 2. 44 4. 81	0. 62 . 22 1. 72 2. 56 6. 07	0. 36 . 27 3. 43 4. 06 2. 67	0. 33 . 03 1. 22 1. 58 2. 27	0. 54 . 09 1. 25 1. 88 7. 48	0. 61 . 19 . 54 1. 34 3. 15	0. 44 . 09 1. 37 1. 90 1. 52	0. 43 . 07 1. 49 1. 99 4. 28
	Iron and steel			Knit goods			Machine tools		
Quit Discharge Lay-off Total separation Accession	0. 40 . 06 . 56 1, 02 2, 31	0. 31 . 04 . 69 1. 04 1. 69	0. 35 . 04 1. 06 1. 45 2. 16	1. 00 . 14 1. 53 2. 67 2. 94	1. 03 . 15 1. 44 2. 62 2. 80	0. 83 . 11 1. 72 2. 66 4. 36	0. 79 . 10 . 36 1. 25 3. 35	0. 61 . 10 . 28 . 99 3. 81	0. 35 . 03 1. 36 1. 74 1. 88
	Men's clothing			Paints and varnishes			Paper and pulp		
Quit	0.86 .12 1.64 2.62 3.43	0.80 .08 1.19 2.07 4.78	0. 76 . 06 1. 50 2. 32 6. 81	0.80 .08 .88 1.76 1.97	0.80 .18 .40 1.38 2.09	0. 49 . 08 1. 05 1. 62 2. 23	0. 64 . 10 1. 01 1. 75 2. 73	0. 51 . 11 1. 48 2. 10 1. 81	0. 53 . 18 . 94 1. 65 1. 77
				Printing and publishing					
	Petroleum refining			Book and job			Newspapers		
Quit Discharge Lay-off Total separation Accession	0. 68 . 10 1. 74 2. 52 2. 18	0. 38 . 07 1. 85 2. 30 2. 36	0. 45 . 05 1. 76 2. 26 2. 52	0, 43 . 14 3, 91 4, 48 4, 15	0. 48 . 16 3. 57 4. 21 3. 78	0. 58 . 12 2. 73 3. 43 4. 72	0. 39 . 09 1. 35 1. 83 2. 47	0. 40 . 04 1. 34 1. 78 1. 27	0. 33 . 06 1. 56 1. 95 2. 89
	Radios and phonographs			Rayon and allied products			Rubber boots and shoes		
Quit Discharge Lay-off. Total separation Accession	2. 25 . 32 2. 98 5. 55 8. 16	1. 10 . 15 1. 81 3. 06 6. 51	1. 11 . 08 2. 22 3. 41 5. 36	0. 65 . 14 . 45 1. 24 2. 41	0.71 .14 .35 1.20 3.30	1.06 .12 .60 1.78 6.57	0. 85 . 08 1. 61 2. 54 4. 08	0. 64 . 08 . 63 1. 35 3. 10	0.73 .01 .24 .98 3.86
	Rubber tires			Sawmills			Silk and rayon goods		
Quit	0. 48 . 05 . 86 1. 39 3. 47	0.39 .07 .84 1.30 3.00	0. 45 . 05 1. 52 2. 02 6. 25	1. 48 . 18 2. 93 4. 59 5. 93	1. 14 . 18 2. 23 3. 55 5. 05	1. 55 . 22 3. 70 5. 47 7. 94	1. 13 . 14 3. 88 5. 15 4. 74	1. 29 . 06 1. 33 2. 68 8. 57	0. 95 . 06 1. 20 2. 22 5. 56
	"Slaughtering and meat packing			Steam and hot-water heating apparatus			Woolen and worsted goods		
Quit Discharge Lay-off Total separation Accession	0, 53 , 16 5, 86 6, 55 5, 96	0. 55 . 17 4. 31 5. 03 7. 42		0. 95 . 13 . 98 2. 06 3. 49	0. 48 . 09 . 57 1. 14 2. 76	1. 62	1. 14 . 20 6. 20 7. 54 3. 80	1.84 3.00	3.8 4.8

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## **Employment Offices**

# PLACEMENT WORK AND UNEMPLOYMENT COMPENSATION IN SEPTEMBER 1939

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PLACEMENTS in private industry by the Public Employment Services set another new all-time high as business activity expanded during September. Although there were fewer working days than in August, over 287,000 private jobs were filled, an increase of 13 percent over the preceding month. The active file of job seekers was reduced about 110,000, a decline of 2½ percent from the preceding month.

Over 352,000 complete placements were made during September. with nearly 82 percent representing placements in private industry, The 287,000 private placements represented a 42-percent increase over September 1938, and a 20-percent gain over the corresponding Gains were widespread, the sharpest increases month in 1937. being reported for the East South Central and the Mountain areas. Private placements almost quadrupled in New Mexico and more than doubled in Mississippi and Arkansas. These extreme expansions reflect for the most part increased activity in agricultural placements. The States which showed the most pronounced decreases in September-North Dakota, North Carolina, and Virginia-had experienced the sharpest gains in the previous month. Placements of men in private jobs totaled 164,000, a gain of nearly 20 percent over August, while placements of women numbered approximately 123,000. an increase of 5.6 percent over the preceding month. Regular placements—jobs lasting more than 1 month—comprised nearly half of the total private placements made. They were 4.7 percent higher than in August, and were 46 percent higher than a year ago. During the first three quarters of 1939, placements in private industry aggregated 1,884,000 as compared with 1,339,000 and 1,855,000, respectively, for the corresponding periods of 1938 and 1937.

In addition to the private placements, 65,000 public placements were made. Supplemental placement activities expanded, with over 205,000 jobs being filled in this manner. Texas accounted for more than two-thirds of such placements, most of which were agricultural. Although the employment offices were not entirely responsible for making these placements, the State services aided in bringing the

worker and employer together.

Table 1.—Summary of Placement Operations, United States, September 1939

	,	Percei	nt of change	from—
Activity	Number	August 1939	September 1938	September 1937
Total applications	1, 287, 000 566, 147 720, 853	$   \begin{array}{r}     -0.8 \\     +1.4 \\     -2.5   \end{array} $	+20. 2 +8. 3 +31. 6	+115, 1 +103, 0 +125, 8
Total placements	352, 535 287, 290 140, 998 146, 292 65, 245	$\begin{array}{c} +4.8 \\ +13.2 \\ +4.7 \\ +22.9 \\ -21.0 \end{array}$	+25.4 +41.8 +46.2 +37.9 -17.0	+1.9 +19.9 +37.0 +7.0 -38.7
Active file (end of month)	5, 680, 310	-2.5	-28.7	+22.5

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As the number of private placements continued to increase, the number of persons actively seeking work through employment offices declined again, making a new low since December 1937. file, however, was still about 806,000 higher than in December 1937, but about 2,439,000 below August 1938, the high month of last year. All areas of the country showed declines in the number of persons actively seeking work, with the exception of the East South Central region, which showed a slight increase as a result of gains of 5.6 percent and 10.8 percent in Kentucky and Mississippi, respectively. Increases in the active file were reported by 12 other States and Alaska and Hawaii. The largest relative declines occurred in the South Atlantic and the West South Central areas, each of which showed a decrease of 5.7 percent. At the close of September there were 5,680,000 active applicants for work on file at the offices of the public employment services. This figure represented a decline of 2½ percent from the previous month, and about 29 percent fewer than in September 1938. Applications for 4,275,000 men and about 1,405,000 women were on file.

About 1,287,000 applications for work were received at the employment offices, with nearly 904,000 being received from men and 383,000 from women. The largest increases were reported for New Mexico, New York, and Hawaii.

About 12,000 placements of veterans were completed, with over 8,000 being made in private industry. The number of veterans actively seeking work through the facilities of the employment service approximated 239,000.

Table 2.—Summary of Veterans' Activities, September 1939

		Percer	nt of change i	rom-
Activity	Number	August 1939	September 1938	September 1937
Total applications  New applications  Renewals	40, 882 13, 340 27, 542	-5.7 +6.0 -10.5	-4.1 -13.4 +1.2	+41.° +52. +37.
Total placements Private. Regular Temporary Public	12, 030 8, 494 3, 026 5, 468 3, 536	$ \begin{array}{r} -6.1 \\ +5.4 \\ -2.9 \\ +10.7 \\ -25.6 \end{array} $	$ \begin{array}{r} -4.3 \\ +15.0 \\ +19.5 \\ +12.6 \\ -31.8 \end{array} $	-35. -20. -18. -21. -55.
Active file (end of month)	238, 873	-6.7	-42.5	-2.

Primarily as a result of the sharp expansion in business activity, benefit payments to unemployed workers declined 24.0 percent to a total of \$33,806,000. Only 9 States showed increases, the largest being reported by Florida, where further declines in employment in seasonal industries occurred. The most pronounced reduction occurred in Michigan, where payments amounted to about half of the total paid out in August. Reemployment in the automobile industry contributed to this decrease. Decreases ranging between 20 and 40 percent were reported by 15 States. The majority of the more industrialized States showed decreases of 25 percent or more. The total amount paid out represented the smallest disbursement for any month since April of this year, despite the fact that more States are now paying benefits than at that time. (See table 4.)

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Coincident with the decline in payments, initial and reopened claims, as well as continued claims, received in local offices decreased almost as much as the amount of benefits. Increases were reported by relatively few States. As of the close of September 1939, about \$739,000,000 in benefits have been issued since the initiation of benefit payments, with over \$343,000,000 paid since January 1, 1939.

Table 3.—Activities of Public Employment Services in the United States, September 1939 TOTAL

		Pl	acemen	tg 1				Applie	ations		
			Private	,		Sup-				Active	Per-
Division and State	Total	Num- ber	Percent of change from August		Pub- lic	mental place- ments	Field visits	Total	New	file, Sept. 30, 1939	sonal visits
United States	352, 535	287, 290	+13	140, 998	65, 245	205, 266	177, 147	1,287,000	566, 147	5,680,310	9,349,093
New England Maine New Hampshire Vermont. Massachusetts Rhode Island Connecticut	15, 865 2, 230 2, 003 1, 843 3, 630 1, 077 5, 082	12, 321 1, 414 1, 398 1, 504 2, 919 833 4, 253	+16 -19 -14 +95 +34 -8 +24	545 1, 826 607	3, 544 816 605 339 711 244 829	717 60 124 20 166 116 231	5, 102 912 819 392 1, 168 637 1, 174	68, 598 8, 342 5, 875 2, 902 28, 097 7, 050 16, 332		30, 078 25, 430 15, 056 249, 153	634, 346 49, 296 35, 66 15, 36 328, 16 89, 80 116, 066
Middle Atlantic New York New Jersey Pennsylvania	47, 809 24, 983 11, 149 11, 677	39, 282 20, 411 10, 693 8, 178	+13 +20 +3 +13	22, 085 10, 459 6, 018 5, 608		2, 417 997 421 999	33, 095 13, 305 10, 356 9, 434	356, 222 202, 778 42, 930 110, 514	133, 256	275, 200	2,200,667 <sup>8</sup> 1,124,290 256, 774 819, 600
E. N. Central Ohio Indiana Illinois Michigan Wisconsin	16, 177 9, 293 12, 591	53, 313 14, 655 8, 805 12, 379 10, 673 6, 801	$^{+15}_{+27}_{+26}_{+11}$	29, 383 7, 804 5, 065 6, 094 6, 459 3, 961	1, 522 488 212	6, 884 2, 143 3, 242 415 266 818	13, 105	237, 984 72, 282 33, 681 54, 180 50, 508 27, 333	21, 209 14, 513 28, 638 16, 164	186, 958 190, 021 241, 018	2,028,936 582, 723 209, 673 620, 454 470, 896 145, 194
W. N. Central Minnesota Iowa Missouri North Dakota South Dakota Kansas	39, 013 8, 195 8, 657 9, 864 4, 661 145 4, 214 3, 277	29, 284 5, 833 6, 261 8, 921 3, 695 108 1, 834 2, 632	+8 +12 +30 +78 -56 +35 +21	11, 425 2, 845 2, 491 3, 036 1, 036 31 927 1, 059		1, 509 836 136 44 109 0 82 302	22, 348 7, 849 4, 211 4, 297 902 37 2, 129 2, 923	104, 004 18, 355 15, 581 41, 177 5, 638 496 9, 234 13, 523	6, 574 5, 646 20, 708 2, 325	157, 297 87, 116 133, 969	649, 13 193, 34 119, 38 184, 33 33, 99 2, 09 50, 72 65, 26
South Atlantic Delaware Maryland Dist. of Col. Virginia West Virginia North Carolina South Carolina Georgia Florida	47, 104 1, 743 3, 781 3, 833 7, 327 3, 978 10, 580 3, 135 10, 159 2, 568	33, 800 1, 497 2, 993 3, 434 5, 078 3, 068 6, 582 2, 159 7, 219 1, 770	$     \begin{array}{r}       -2 \\       +21 \\       +3 \\       +13 \\       -25 \\       +41 \\       -31 \\       +24 \\       +24 \\       +23 \\   \end{array} $		13, 304 246 788 399 2, 249 910	2, 481 53 47 36 297 969 617 24 294	14, 657 274 1, 347 279 2, 290 1, 404 1, 894 1, 294 4, 866 1, 009	143, 489 4, 323 17, 286 10, 153 21, 454 17, 784 25, 863 8, 958 24, 314 13, 354	62, 354 1, 048 6, 035 3, 941 8, 246 4, 055 11, 386 4, 115	657, 449 13, 662 55, 886 35, 615 47, 155 69, 205 100, 249 96, 718	1,026,61- 21,59,80,20 61,13, 111,17; 112,05; 210,46; 104,95; 153,89; 171,14
E. S. Central  Kentucky  Tennessee  Alabama  Mississippi	23, 778 3, 412 6, 036 5, 142 9, 188	16, 766 2, 317 5, 076 4, 155 5, 218	+66 +64 +54 +35 +123	10, 516 1, 440 2, 390 2, 245 4, 441	7, 012 1, 095 960 987	24, 632 896	8, 318 1, 435 3, 000 2, 416 1, 467	85, 866 23, 639 13, 136	45, 197 14, 195 7, 743 8, 873	423, 282 88, 276 130, 811 121, 539	494, 298 93, 316 136, 464
W. S. Central Arkansas Louisiana Oklahoma Texas	44, 527 5, 860 5, 241 6, 726 26, 700	37, 789 5, 006 4, 348 5, 610 22, 825	+22 +114 +16 +92 +4	13, 295 1, 876 3, 027 1, 114 7, 278	6, 738 854 893 1, 116 3, 875	146, 513 3, 770 1, 363 612 140, 768	28, 524 2, 268 4, 536 2, 772 18, 948	94, 456 7, 701 21, 425 18, 604 46, 726	4, 517 7, 555 7, 584	71, 915 100, 589 54, 795	868, 24 93, 53 142, 27 133, 64 498, 78
Mountain Montana Idaho Wyoming Colorado New Mexico Arizona Utah Nevada	26, 533 1, 830 3, 702 1, 550 7, 124 5, 815 3, 341 1, 999 1, 172	21, 791 1, 021 2, 282 903 6, 407 5, 566 2, 917 1, 740 955	+48 +2 +20 +8 +16 +379 +78 -1 +2	9, 030 628 857 566 1, 847 1, 875 2, 075 619 563	4, 742 809 1, 420 647 717 249 424 259 217	5, 656 280 511 52 487 1, 324 2, 379 559 64	11, 070 1, 365 1, 531 350 3, 252 2, 119 1, 040 886 527	53, 003 4, 611 6, 278 3, 055 14, 704 7, 359 6, 782 7, 732 2, 482	1, 291 1, 938 791 5, 355 1, 508	33, 859	339, 840 43, 16 48, 940 21, 20 99, 620 30, 740 43, 444 35, 074 17, 630
Pacific Washington Oregon California	47, 137 11, 701 8, 473 26, 963	42, 375 10, 620 7, 019 24, 736	$     \begin{array}{r}       -4 \\       -16 \\       -11 \\       +5     \end{array} $	16, 734 2, 035 3, 089 11, 610	4, 762 1, 081 1, 454	14, 307 682 8, 615 5, 010	15, 090 2, 579 2, 575 9, 936	140, 730 24, 689 15, 342	54, 156 6, 329 4, 582	497, 112 88, 286 26, 872	1,083,486 129, 52 114, 84 839, 106
llaska Ilawaii	337 734	223 346	+19 +2	43 123	114 388	40 110		679 1, 969	293	1,744	6, 573 16, 95

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Preliminary.

Less than a half of 1 percent increase.

Estimated.

Operations suspended from July 27 to September 27. Data cover four days, September 27–30.

Table 3.—Activities of Public Employment Services in the United States, September 1939—Continued

		Pla	cements	1		Aj	plication	ns	
			Private				N	ew	Active file,
Division and State	Total	Num- ber	Per- centage change from August	month)	Public	Total	Num- ber	Per- centage change from August	September 30, 1939
United States	228, 194	163, 996	+20	70, 025	64, 198	903, 882	362, 959	-1	4, 275, 470
New England	1, 481 1, 484 1, 500 2, 082 565	6, 692 665 895 1, 161 1, 379 328 2, 264	+22 -28 -19 +184 +43 +3 +30	3, 703 400 500 353 789 240 1, 421	3, 509 816 \$ 589 339 703 237 \$ 815	42, 530 5, 827 3, 648 1, 974 16, 742 4, 368 9, 971	15, 218 1, 207 832 634 8, 095 \$1, 886 2, 564	-2 -1 -15 -5 +4 -4 -11	291, 576 22, 339 17, 405 10, 950 162, 795 23, 037 55, 050
Middle Atlantic New York New Jersey Pennsylvania	24, 196 13, 749 3, 798	15, 762 9, 210 3, 354 3, 198	+18 +22 +12 +14	9, 186 4, 766 2, 272 2, 148	8, 434 4, 539 444 3, 451	247, 779 141, 302 27, 205 79, 272	119, 154 92, 234 11, 012 15, 908	+24 +37 -2 -11	991, 932 365, 112 198, 682 428, 138
East North Central Ohio Indiana Illinois Michigan Wisconsin	9, 285 4, 594 6, 594 8, 449	27, 943 7, 792 4, 148 6, 420 6, 084 3, 499	+24 +46 +39 +22 (3) +23	13, 814 3, 649 2, 056 3, 041 3, 183 1, 885	6, 115 1, 493 446 174 2, 365 1, 637	168, 882 53, 297 21, 839 37, 533 37, 605 18, 608	54, 529 12, 481 9, 050 18, 501 9, 696 4, 801	-20 -20 +5 -30 -19 -14	850, 256 226, 762 145, 044 145, 440 195, 417 137, 598
West North Central Minnesota Iowa Missouri North Dakota South Dakota Nebraska Kansas	27, 017 5, 300 5, 908 6, 320 3, 774 107 3, 449	17, 524 2, 949 3, 658 5, 395 2, 832 72 1, 098 1, 520	$ \begin{array}{r} -1 \\ +2 \\ +43 \\ +124 \\ -64 \\ \end{array} $ $ \begin{array}{r} +62 \\ +18 \\ \end{array} $	5, 468 1, 304 1, 342 1, 377 541 14 440 450	9, 493 2, 351 2, 250 925 942 35 2, 351 639	73, 478 12, 217 10, 742 28, 244 4, 420 359 7, 174 10, 322	26, 752 3, 643 3, 417 12, 951 1, 620 156 1, 680 3, 285	-29	405, 75; 124, 326 65, 46; 94, 42; 22, 49; 26, 40; 40, 34; 32, 29
South Atlantic	31, 277 843 2, 665 1, 714 5, 005 2, 459 6, 825 2, 428 7, 482	18, 072 597 1, 877 1, 325 2, 761 1, 555 2, 868 1, 462 4, 562 1, 065	+11 +19 +7 +7 -4 +76 -21 +44 +31 +27	10, 203 477 1, 120 585 1, 862 1, 083 1, 563 1, 063 1, 746 704	13, 205 ; 246 788 389 2, 244 904 3, 957 966 2, 920 791	98, 669 2, 791 11, 756 5, 883 13, 994 13, 719 16, 874 6, 406 17, 690 9, 556	39, 785 567 3, 560 2, 192 4, 894 2, 487 7, 123 2, 495 9, 699 6, 768	-17 -21 +1 -7 -13 +16 -20 -13	8, 78 42, 66 22, 97 32, 74 57, 07 65, 73 74, 10 128, 2
East South Central Kentucky Tennessee Alabama Mississippi	17, 345 2, 319 3, 471 3, 839	10, 383 1, 232 2, 533 2, 861	+85 +35	6, 430 829 842 1, 564 3, 195	6, 962 1, 087 938 978 3, 959		31, 844 10, 632 4, 421 6, 322 10, 469	-3 -4 +4	70,9 100,9 97,0
West South Central Arkansas Louislana Oklahoma Texas	29, 361 4, 302 3, 106 4, 554	22, 696 3, 463 2, 239 3, 445 13, 549	+177 +34 +162	335	1, 109	5, 243 15, 592 14, 054	5, 297	(2) +3 -25	60,9 80,2 45,1
Mountain  Montana Idaho Wyoming Colorado New Mexico Arizona Utah Nevada	20, 423 1, 549 2, 888 1, 366 5, 464 4, 807 2, 436 1, 053	15, 754 760 1, 477 728 4, 760 4, 567 2, 015 800	+59 +4 +14 +15 +28 +454 +87 -25	5, 704 471 366 488 927 1, 242 1, 540 241	4, 669 789 1, 411 638 704 240 421 253	41, 151 3, 911 5, 024 2, 446 10, 753 6, 223 5, 172 5, 676	11, 042 891 1, 384 534 3, 524 941 2, 081	-10 -10 -10 -10 -10 -10 -10 -10 -10 -10	23,3 7 11,4 6,3 14,6 16,4 17,1 16,4
Pacific	8, 854 7, 209	7, 816 5, 761	-6	930 2, <b>2</b> 35	1,038 1,448	18, 825 12, 397	3, 783 3, 357	7 -	71,
AlaskaHawaii		179							

Preliminary.
 Decrease of less than a half of 1 percent.
 Operations suspended from July 27 to September 27. Data cover 4 days, September 27-30.
 Increase of less than a half of 1 percent.

TABLE 3.—Activities of Public Employment Services in the United States, September 1939—Continued

September

Active file, September 30,

4, 275, 470

291, 576 22, 339 17, 405 10, 950 162, 795 23, 037 55, 050

991, 932 365, 112 198, 682 428, 138

850, 256 226, 762 145, 044 145, 440 195, 417 137, 593

405, 753 124, 328 65, 463 94, 421 22, 498 26, 408 40, 340 32, 295

477, 657 8, 781 42, 664 22, 977 32, 762 57, 078 65, 758 74, 100 128, 212 45, 330

336, 705 70, 964 100, 973 97, 035 67, 733

387, 286 60, 942 80, 271 45, 197 200, 876

156, 342 23, 340 11, 675 6, 131 48, 024 28, 244 17, 644 16, 946 4, 338

369,080 71,239 20,705 277,136

1, 533 7, 350

#### WOMEN

		Placen	nents 1		A	pplication	ns	
	*		Private			Ne	w	Active file.
Division and State	Total	Num- ber	Per- centage change from August	Regu- lar (over 1 month)	Total	Num- ber	Per- centage change from August	Sept. 30, 1939
United States	124, 341	123, 294	+6	70, 973	383, 118	203, 188	+5	1, 404, 840
New England Maine New Hampshire Vermont Massachusetts Rhode Island Connecticut	5, 664 749 519 343 1, 548 512 1, 993	5, 629 749 503 343 1, 540 505 1, 989	+9 -10 -2 -6 +27 -14 +18	3, 822 625 360 192 1, 037 367 1, 241	26, 068 2, 515 2, 227 928 11, 355 2, 682 6, 361	12, 575 965 669 336 6, 831 1, 304 2, 470	+3 +20 +11 -26 +6 -20 +6	149, 821 7, 739 8, 025 4, 106 86, 358 16, 565 27, 028
Middle Atlantic New York New Jersey Pennsylvania	7, 351	23, 520 11, 201 7, 339 4, 980	+10 +17 -1 +11	12, 899 5, 693 3, 746 3, 460	108, 443 61, 476 15, 725 31, 242	62, 163 41, 022 8, 837 12, 304	+14 +18 +15 +3	366, 822 169, 242 76, 518 121, 062
East North Central Ohio Indiana Illinois Michigan Wisconsin	25, 640 6, 892 4, 699 5, 997 4, 667 3, 385	25, 370 6, 863 4, 657 5, 959 4, 589 3, 302	+7 +10 +16 +1 (3) +9	15, 569 4, 155 3, 009 3, 053 3, 276 2, 076	69, 102 18, 985 11, 842 16, 647 12, 903 8, 725	34, 514 8, 728 5, 463 10, 137 6, 468 3, 718	-7 -12 -2 -12 (²) +7	230, 645 67, 684 41, 914 44, 581 45, 601 30, 865
West North Central Minnesota Iowa Missouri North Dakota South Dakota Nebraska Kansas	11, 996 2, 895 2, 749 3, 544 887 38 765 1, 118	11, 760 2, 884 2, 603 3, 526 863 36 736 1, 112	+24 +24 +15 +36 +24 +8 +26	5, 957 1, 541 1, 149 1, 659 495 17 487 609	30, 526 6, 138 4, 839 12, 933 1, 218 137 2, 060 3, 201	16, 207 2, 931 2, 229 7, 757 705 71 1, 011 1, 503	+5 +13 +5 +4 +10	124, 687 32, 969 21, 653 39, 548 5, 790 6, 726 10, 188 7, 813
South Atlantic Delaware Maryland District of Columbia Virginia West Virginia North Carolina South Carolina Georgia Florida	15, 827 900 1, 116 2, 119 2, 322 1, 519 3, 755 707 2, 677	15, 728 900 1, 116 2, 109 2, 317 1, 513 3, 714 697 2, 657 705	-15 +23 -2 +17 -41 +17 -37 -3 +15 +17	10, 636 585 631 1, 075 1, 812 888 2, 763 539 1, 807	44, 820 1, 532 5, 530 4, 270 7, 460 4, 065 8, 989 2, 552 6, 624	22, 569 481 2, 475 1, 749 3, 352 1, 568 4, 263 1, 620 4, 331 2, 730	+7 -24 +8 +7 +31 +3 +9 +5 +2 +2	179, 792 4, 881 13, 222 12, 638 14, 393 12, 127 34, 496 22, 618 49, 061 16, 356
East South Central Kentucky Tennessee Alabama Mississippi	6, 433 1, 093 2, 565 1, 303	1, 294	+46 +54 +32 +36 +84	611 1, 548	5, 688 5, 119 5, 160	3, 563 3, 322 2, 551	+24 +26 +19 +17 +31	86, 577 17, 312 29, 838 24, 504 14, 923
West South Central Arkansas Louisiana Oklahoma Texas	1, 558 2, 135 2, 172	1, 543 2, 109 2, 165	+1 +35	1 638 779	2, 458 5, 833 4, 550	1, 458 2, 555 2, 287	+9 +4 -3	20, 318 9, 598
Mountain  Montana Idaho Wyoming Colorado New Mexico Arizona Utah Nevada	6, 110 281 814 184 1, 660 1, 008 905 946	261 805 175 1,647 999 902 940	$ \begin{array}{r} -3 \\ +33 \\ -14 \\ -7 \\ +196 \\ +63 \\ +36 \end{array} $	157 491 78 920 633 533	7 700 1 1, 254 8 609 0 3, 951 3 1, 136 5 1, 610 8 2, 056	400 554 257 1,831 567 895 673	-13 +4 -14 +1 +21 +44 -31	1, 712 1, 730 12, 256 5, 615 4, 064 4, 309
Pacific Washington Oregon California	13, 704 2, 847 1, 264	13, 595 2, 804 1, 258	-14 -35 -26	7, 229 1, 100 85	8 41, 049 5 5, 864 4 2, 949	19, 988 2, 546 5 1, 225	$ \begin{array}{c c} -4 \\ -16 \\ -12 \end{array} $	128, 032 17, 047 6, 167
Alaska	45			3 1				

Preliminary.
 Increase of less than a half of 1 percent.
 Operations suspended from July 27 to September 27. Data cover 4 days, September 27-30.

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Table 4.—Unemployment Compensation—Initial and Reopened, and Continued Claims Received in Central Offices, and Number and Amount of

Benefits Paid, by States, September 1939

		LFrein	linary data	reported by	y State agenc	Preliminary data reported by State agencies, corrected to Oct. 10, 1939	o Oct. 10, 1	[626]				
	Initial and claims r	Initial and reopened claims received	Continued claims received	d claims		Benefits paid		Average weekly be fit payments by ty of unemployment	Average weekly benefit payments by type of unemployment			
State						Amount	nt			Date bene-		Amount of payments
	Number	recent- age change from August	Number	Percent- age change from August	Number	All payments	Percent- age change from August	Total unemploy- ment	Partial unemploy- ment <sup>1</sup>		-	fits first payable
Total, States reporting.	474, 903	-24.6	3, 310, 530	-23.2	3, 228, 143	\$33, 805, 568	-24.0	6.0 E E E E E E E E E E	6 6 8 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1		\$739, 023, 304
Alabama Alaska Arizona	5, 672 472 1, 699	-38.0 +43.0 -37.6	57, 225 1, 540 10, 997	-14.8	55, 416 1, 060 10, 525	387, 949 15, 150 114, 966	-10.2 -15.4 -11.1	\$7.32 15.44 11.08	\$5.88 5.21 7.68		938	11, 577, 594 278, 437 3, 104, 962
California Colorado	30,117	-15.2	252, 320 17, 322	-15.9 -32.3	21, 055 233, 479 16, 758	2, 495, 781 170, 031	1.23.7	11.48	6.82	January 1 January 1 January 1	938	1, 456, 057 52, 485, 739 2, 905, 608
Connecticut Delaware District of Columbia Florida	9,846 1,090 1,560 6,382	-25.6 -28.9 -40.7	44, 019 6, 647 15, 521 87, 698	-24.4 -8.2 +8.4	48, 888 6, 501 12, 239 84, 438	465, 196 53, 586 96, 752 732, 543	-12.6 -15.5 +27.5	(3) 9.28 8.10 9.23	(2) 4.31 6.65 7.85		938	16, 507, 624 572, 837 2, 820, 838 2, 363, 313
Georgia Hawaii Idaho	8, 392 867 776	-21.0 +88 5 -13.3	46, 815 2, 840 4, 086	1+12.7	45, 947 2, 839 5, 484	318	12.5	9.43	8.0.0 8.0.0 74.0 8.00	oo.	938	
Indiana Iowa Kansas Kentucky Louisiana.	6,877 8,877 13,150 4,069	1.23.6 +133.6 -13.1	25, 576 27, 762 27, 072 14, 051 25, 384 25, 503	2.92 2.92 2.92 2.92 4.11 4.60 4.44	56, 453 30, 796 14, 104 56, 727 22, 383	5, 924, 128 308, 988 129, 443 337, 898 454, 476 151, 516	+4.2 +4.9 -1.7.6 -3.1 -4.7	7.8 8.9 2.28 7.8 8.40 12.33 5.40	. 4.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.	April 19 19 19 19 19 19 19 19 19 19 19 19 19	1938 1938 1938	24, 933, 673 7, 198, 899 1, 905, 026 4, 228, 711 8, 897, 847 6, 970, 802
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13.9	29.8 - 25.5 - 25.5 - 25.5 - 27.4 - 12.9 - 27.4 - 32.3	(19) (10) (11) (11) (11) (12) (13) (13) (13) (14) (15) (16) (16) (16) (16) (16) (16) (16) (16
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+15.1 -12.4 -4.0 -5.8	10.6 10.6 10.6 125.7 122.0 19.9 19.9 14.8	(37.9 (19) -7.8 (17.9 -7.9 -25.4 +13.6 -21.8 -20.4 -19.6
12, 626 7, 581 5, 087 12, 204	93, 284 11, 462 11, 462 106 108, 889 25, 473 22, 372 23, 372 334, 139 64, 523	26, 538 474 76, 011 11, 240 5, 148 39, 454 38, 586 26, 583 5, 500
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Montana Nebraska Nevada New Hampshire	New Mexico New Mexico New York North Carolina North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island	South Carolina. South Dakota 16 Tennessee Texas. Utah. Vermont. Virginia. Washington. West Virginia. Wisconsin.

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Michigan. Minnesota. Mississippi Missouri

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Includes payments for part-total unemployment except where otherwise noted.

Break-down not available.

\* Includes 9,134 initial claims for miners. The filing of these claims was delayed due to labor disputes.

\* Includes 9,134 initial claims for miners. The filing of these claims was delayed due to labor disputes.

\* Part-total unemployment only. Provision for payment of benefits for partial unemployment: Massachusetts, Mississippi, Montana, New Jersey, New York.

\* The following States have no provision in their State laws for the payment of benefits for partial unemployment.

\* And He above, with the exception of Mississippi, have no provision for the reduction of the full-time weekly benefit amount for total unemployment resulting from a licitudes irregular payments.

\* Includes irregular payments.

\* Includes payments for partial unemployment made on a monthly basis.

\* Represents number of compensable weeks for which 30,767 checks were issued.

\* Compensable continued claims only.

\* Compensable continued claims only.

\* State agency not operating in August. Operations were suspended from July 28 to September 27, 1939. September data cover the last 4 days of the month.

\* Regulate agency not operating unemployment included with payments for total unemployment.

\* West Virginia makes payments for partial unemployment.

\* West Virginia makes payments for partial unemployment.

## Trend of Employment and Pay Rolls

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#### SUMMARY OF REPORTS FOR SEPTEMBER 1939

#### Total Nonagricultural Employment

MORE than 500,000 workers were returned to employment in non-agricultural occupations between August and September. The major portion of this increase was in manufacturing industries, although there were also substantial gains in wholesale and retail trade, mining, and transportation. Compared with September a year ago, there were approximately 1,150,000 more workers employed in September 1939 in nonagricultural industries. These figures do not include emergency employment which decreased 123,000 in September. Decreases of 116,000 on projects operated by the Work Projects Administration and 21,000 in the Civilian Conservation Corps were partly offset by an increase of 14,000 on work projects of the National Youth Administration, leaving a net decrease of 123,000.

#### Industrial and Business Employment

Employment gains from August to September were reported for 73 of the 90 manufacturing industries surveyed by the Bureau of Labor Statistics and for 11 of the 16 nonmanufacturing industries covered. Increases in pay rolls were shown by 67 manufacturing and 11 nonmanufacturing industries.

Factory employment rose 3.8 percent from August to September, a gain of nearly 300,000 wage earners, and weekly pay rolls increased 4.3 percent, or \$7,300,000. The usual seasonal increases for September are 1.2 percent in employment and 1.0 percent in pay rolls. The September factory employment index of 100.0 (taking the 3-year average 1923–25 as 100) was 8.7 percent higher than September 1938 and above the level of any month since November 1937. Although the recovery in recent months has been unusually pronounced and the employment index has equaled the 1923–25 average level for the first time in 22 months, factory employment in September of this year was still approximately 10 percent below the levels reached in July and August of 1937. The current factory pay-roll index (93.6) was 14.7 percent higher than a year ago and above the level of any month since October 1937.

As in July and August, most of the employment gains were larger than seasonal, particularly in the durable goods industries. Among the industries showing such increases were automobiles (106,700 workers); steel (16,700 workers); electrical machinery (9,800 workers); cottonseed oil, cake, and meal (8,200 workers); rayon and allied products (7,200 workers); foundries and machine shops (6,400 workers); furniture (5,500 workers); wirework (5,200 workers); brass, bronze, and copper products (4,900 workers); fertilizers (4,500 workers); machine tools (4,500 workers); shipbuilding (4,100 workers); lighting equipment (3,500 workers); millinery (3,200 workers); beet sugar (2,700 workers); chemicals (2,600 workers); and flour (1,500 workers).

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Gains of about seasonal proportions were reported for cotton goods (9,700 workers), paper boxes (2,600 workers), and dyeing and finishing textiles (1,700 workers). Confectionery establishments and women's clothing firms reported smaller-than-seasonal employment increases of 8,000 workers and 5,700 workers, respectively. The 3.8 percent increase in aircraft manufacturing employment continued the unbroken succession of monthly gains which began in October of last year and raised the employment level for this industry to an all-time high, which was nearly three times the 1929 level.

The principal employment declines from August to September were largely seasonal and were shown in shoe factories (8,000 workers), woolen mills (7,300 workers), hosiery firms (2,500 workers), beverage plants (2,200 workers), ice-cream plants (1,600 workers), and canesugar refineries (1,200 workers). The decline in the cane-sugar refining industry was due to labor difficulties.

Retail stores reported a slightly better-than-average September employment gain of 5.8 percent, or 186,000 workers. General merchandising concerns increased their forces seasonally by 11.4 percent and apparel stores by 20.9 percent. In food stores and in firms dealing in fuel, the September increases of 1.2 percent and 5.7 percent, respectively, were larger than the average September gains of the preceding 5 years. Employment in retail automobile establishments showed about the usual autumn employment decline (0.6 percent) preceding the showing of new models. In the remaining important groups of retail trade, employment changes followed the usual seasonal trend.

Employment in wholesale trade showed a greater-than-seasonal expansion of 1.6 percent, or 22,000 workers, virtually all lines of wholesale activity reporting gains. The September employment level for this industry (90.4 percent of the 1929 average) was above that registered during any of the preceding 18 months.

Coal mines continued to recall more workers in September, anthracite mines increasing their forces by 1,200 wage earners and bituminous-coal mines by 19,000. In each of these industries, pay rolls rose more

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sharply than employment, reflecting increased production. Metal mines also reported an employment gain (3,000 workers), while quarries and nonmetallic mines reported a smaller-than-seasonal decline of 0.5 percent. Oil wells reduced their forces, reflecting curtailed operations in a number of States. Public utilities reported little change in employment, while brokerage firms, responding to increased market activity in mid-September, showed a large employment gain.

Employment in private building construction showed an increase of 0.6 percent from August to September, according to reports from 14,106 contractors employing 145,605 workers, and the volume of pay rolls increased 1.5 percent. There were employment gains in five of the nine geographic divisions. The South Atlantic States and the New England States showed the most marked employment improvement with gains of 2.8 percent and 1.8 percent, respectively. Increases of 1.0 percent, 0.7 percent, and 0.4 percent were reported for the West North Central, East North Central, and the East South Central States, respectively. A continued recession in all Mountain States except Montana, Idaho, and Utah resulted in a net reduction of 3.0 percent for this area. Employment in the Middle Atlantic States fell 0.5 percent, slight decreases in New York and New Jersey nullifying a small gain in Pennsylvania. In the West South Central States, employment decreased 0.2 percent, and in the Pacific States. 0.1 percent. The reports on which the figures are based do not cover construction projects financed by the Works Progress Administration, the Public Works Administration, and the Reconstruction Finance Corporation, or by regular appropriations of the Federal, State, or local Governments.

A preliminary report of the Interstate Commerce Commission showed an employment gain by class I railroads from August to September of 1.4 percent, the total number at work in September being 1,019,063. Corresponding pay rolls were not available when this report was prepared. For August they were \$160,315,811, an increase of 3.5 percent over the July figure of \$154,856,716.

Hours and earnings.—The average hours worked per week by wage earners in manufacturing industries were 37.9 in September, a decrease of 0.3 percent since August. The average hourly earnings of these workers were 64.3 cents, a gain of 0.7 percent as compared with the preceding month. Average weekly earnings of factory workers climbed 0.5 percent to \$24.69.

Of the 14 nonmanufacturing industries for which man-hours are available, 7 showed increases in average hours worked per week and 11 showed gains in average hourly earnings. Twelve of the 16 nonmanufacturing industries surveyed reported higher average weekly earnings.

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Employment and pay-roll indexes and average weekly earnings in September 1939 for all manufacturing industries combined, for selected nonmanufacturing industries, and for class I railroads, with percentage changes over the month and year intervals, are presented in table 1.

TABLE 1.-Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, September 1939 (Preliminary Figures)

	Emp	oloymen	it	Pt	y rolls			arnings	kly
Industry	Index.		ntage from—	Index.	Percei		Average	Percei	
	Septem- ber 1939	Au- gust 1939	Sep- tember 1938	Septem- ber 1939	Au- gust 1939	Sep- tem- ber 1938	Sep- tem- ber 1939	Au- gust 1939	Sep- tem- ber 1938
All manufacturing industries	(1923-25 = 100)			(1923-25 = 100)					
combined 1	100. 0 57. 1	+3.8 +1.4	+8.7 +5.8	93.6	+4.3	+14.7	\$24. 69 (3)	+0.5	+5.5 (3)
	(1929 = 100)			(1929= 100)					
Coal mining: Anthracite 4 Bituminous 4 Metalliferous mining	49.4	+1.9 +5.1 +4.5	+6.4 +2.6 +14.3	40. 0 81. 0 55, 2	+18.3 +8.2 +4.5	+36. 2 +12. 6 +19. 8	26, 86 25, 56 27, 46	+16.1 +3.0 +.1	+28.0 +9.8 +4.8
Quarrying and nonmetallic mining	48. 0 65. 0	5 -2.6	+7.7 -9.2	42. 8 60. 8	4 -2.0	+11.5 -8.6	22, 26 34, 33	(8) +.7	+3.5 +.6
Public utilities: Telephone and telegraph Electric light and power	75. 3	3	+.5	94.8	+.5	+2.4	6 30. 77	+.9	+1.8
and manufactured gas Electric-railroad and mo- tor bus operation and	93, 8	+(4)	+1.5	101. 2	+.1	+2.8	633.96	+.1	+1.3
maintenance	69. 9	+.1	+.8	70. 4	8	+2.9	6 32. 91	9	+2.1
Wholesale	90. 4 87. 3 100. 1	+1.6 +5.8 +11.4	+3.1	77. 8 72. 3 88. 3	+4.2	+4.8 +4.2 +3.5		+.5 -1.5 -2.3	+2.5 +1.2 +.3
Other than general merchandising Hotels (year-round) 4 7 Laundries 4 Dyeing and cleaning 4 Brokerage Insurance	91. 2 97. 7 105. 2	+4.1 +1.5 -1.4 +2.4 +6.0	$ \begin{array}{r}7 \\ +1.3 \\ -2.4 \\ -1.0 \end{array} $	69. 0 80. 4 84. 4 78. 3	+1.3 -1.8	+2.0 +3.7 -4.2 +3.2 +2.4	6 15. 15 17. 67 20. 35 6 36. 81 6 34. 10		+1.4 +2.7 +2.4 -1.8 +4.3 +1.4 +5.6

Revised indexes; adjusted to 1937 Census of Manufactures.

Preliminary source—Interstate Commerce Commission. Not available.

Not available.
 Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of the pamphlet, Employment and Pay Rolls.
 Less than half of 1 percent.
 Average weekly earnings not strictly comparable with figures published in issues of the Monthly Labor Review dated earlier than April 1938 (except for the January figures appearing in the March issue), as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.
 Cash payments only; the additional value of board, room, and tips cannot be computed.

#### Public Employment

Because the 1935, 1936, and 1937 Public Works Administration construction programs are rapidly nearing completion and because there were few new contract awards on the 1938 program, employment on construction projects financed from PWA funds declined from 263,000 in August to 247,000 for the month ending September 15. During September, 225,000 workers were employed on projects

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financed from 1938 funds and 22,000 on projects financed from National Industrial Recovery Act and Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds. Pay-roll disbursements for the month were \$22,986,000, or \$833,000 less than in August.

Employment on United States Housing Authority low-rent housing projects continued to rise with an increase of 4,000 for the month ending September 15. Employment for the month was 22,000 and pay rolls amounted to \$2,518,000. These figures cover new construction and demolition and pertain only to those projects started under the USHA; those formerly under the Public Works Administration are shown under the PWA building-construction projects in this report.

Increases on almost all types of construction projects financed from regular Federal appropriations brought employment up to 287,000, an increase of 11,000 over August. Sizable increases were reported on the construction of naval vessels; nonresidential building construction; locks and dams; reclamation projects; and dredging, dyke, and revetment projects. Pay-roll disbursements for the month ending September 15 were \$30,677,000.

Employment on construction projects financed by the Reconstruction Finance Corporation showed a slight increase during the month ending September 15. Approximately 2,600 men were employed and wage payments amounted to \$314,000.

Employment on projects operated by the Work Projects Administration continued to decline when the number at work dropped from 1,835,000 in August to 1,719,000 in September. Pay-roll disbursements of \$90,355,000 were \$17,485,000 less than in August. A decrease was also reported in Federal agency projects financed by the Work Projects Administration. The number at work in September was 81,000 and pay rolls were \$3,921,000.

Employment on work projects of the National Youth Administration increased from 211,000 in August to 225,000 in September, an increase of 14,000. The Student Aid program, after being inactive for 2 months, employed 62,000 students during September. Pay rolls on the work projects were \$4,222,000 and on the Student Aid program, \$268,000.

Decreased employment in the Civilian Conservation Corps was attributed to the fact that many enrollees resigned to accept private employment. The decrease amounted to 21,000, and of the 312,000 remaining on the pay roll, 274,100 were enrollees; 1,700, reserve officers; 1,600, educational advisers; 300, nurses; and 34,300, supervisory and technical employees. Pay rolls for the whole group were \$14,146,000.

Increased employment was reported in all four of the regular services of the Federal Government. Of the 940,000 employees in the executive service, 126,000 were working in the District of Columbia and 814,000 outside the District. Force-account employees (employees who are on the Federal pay roll and are engaged on construction projects) were 10.3 percent of the total number of employees in the executive service. Increased employment was reported in the War and Navy Departments, the Tennessee Valley Authority, and The Panama Canal; while decreases were reported in the Department of Agriculture and the Federal Works Agency.

Employment on State-financed road projects increased 5,000 in the month ending September 14 as compared with August. Of the 161,000 at work in September, 26,000 were on new road construction and 135,000 on maintenance. Pay rolls for both types of road work were \$11,621,000, a decrease of \$285,000 from August.

A summary of Federal employment and pay-roll data for September is given in table 2.

Table 2.—Summary of Federal Employment and Pay Rolls, August and September 1939 1 (Preliminary Figures)

	E	mployment			Pay rolls	
Class	Septem- ber	August	Per- cent- age change	September	August	Percent age change
Federal services:						
Executive 2	939, 876	3 933, 386	+0.7	\$141, 629, 861	3 \$141, 733, 064	-0.1
Judicial	2, 282	2, 162	+5.6	568, 434	554, 291	+2.6
Legislative	5, 551	5, 532	+.3	1, 247, 594	1, 250, 506	+2.6
Military	376, 480	372, 853	+1.0	29, 165, 321	29, 152, 927	+(4)
Construction projects:						
Construction projects: Financed by PWA 4	247, 422	263, 036	-5.9	22, 985, 513	23, 819, 075	-3.5
USHA low-rent housing	21, 958	17, 930	+22.5	2, 517, 739	2, 097, 061	+20.1
Financed by RFC 6	2, 646	2, 555	+3.6	314, 061	288, 736	+8.8
Financed by regular Federal ap-						
propriations	286, 652	275, 506	+4.0	30, 677, 007	28, 094, 698	+9.2
Federal agency projects financed by						
the Work Projects Administration	81, 319	93, 809	-13.3	3, 921, 494	3, 671, 127	+6.8
Projects operated by WPA National Youth Administration:	1, 718, 896	1, 834, 686	-6.3	90, 354, 584	107, 840, 110	-16.2
						-
Work projects	225, 477	211, 195	+6.8	4, 221, 759	4, 150, 973	+1.7
Student aid 7	61, 844	**********		268, 452		
Civilian Conservation Corps	311, 910	333, 121	-6.4	14, 145, 853	14, 816, 914	-4.

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§ Includes 603 employees and pay-roll disbursements of \$56,200 for September 1939; 573 employees and pay-roll disbursements of \$58,401 for August 1939 on projects financed by the RFC Mortgage Co.

§ Student Aid program not in operation during August 1939.

<sup>&</sup>lt;sup>1</sup> Includes data on projects financed wholly or partially from Federal funds.

<sup>3</sup> Includes force-account and supervisory and technical employees shown under other classifications to the extent of 132,695 employees and pay-roll disbursements of \$16,253,503 for September 1939, and 126,570 employees and pay-roll disbursements of \$16,095,375 for August 1939.

Revised.

Less than a tenth of 1 percent.

Data covering PWA projects financed from National Industrial Recovery Act funds, Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds, and Public Works Administration Appropriation Act of 1938 funds are included. These data are not shown under projects financed by the Work Projects Administration. Includes 15,213 wage earners and \$1,451,935 pay roll for September 1939; 17,773 wage earners and \$1,757,377 pay roll for August 1939, covering Public Works Administration projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 225,560 wage earners and \$20,688,881 pay roll for September 1939; 239,071 wage earners and \$21,261,831 pay roll for August 1939, covering Public Works Administration projects financed from funds provided by the Public Works Administration Appropriation Act of 1938.

#### **DETAILED REPORTS FOR AUGUST 1939**

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A MONTHLY report on employment and pay rolls is published as a separate pamphlet by the Bureau of Labor Statistics. This gives detailed data regarding employment, pay rolls, working hours, and earnings for the current month for industrial and business establishments and for the various forms of public employment. This pamphlet is distributed free upon request. Its principal contents for the month of August, insofar as industrial and business employment is concerned, are reproduced in this section of the Monthly Labor Review.

#### Industrial and Business Employment

Monthly figures on employment and pay rolls are available for the following groups: 90 manufacturing industries; 16 nonmanufacturing industries, including private building construction; and class I steam railroads. The reports for the first two of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.

#### EMPLOYMENT, PAY ROLLS, HOURS, AND EARNINGS

The indexes of employment and pay rolls as well as average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries in August 1939 are shown in table 1. Percentage changes from July 1939 and August 1938 are also given. For the manufacturing industries, 2 series of indexes are shown. One series (the new series) has been adjusted to the 1937 Census of Manufactures and the other is a continuation of the previously published indexes which have been adjusted only to the 1935 Census of Manufactures. The percentage changes over the month and year intervals relate to the new series of indexes.

The revised series of employment and pay-roll indexes, as well as average hours worked per week, average hourly earnings, and average weekly earnings for June, July, and August 1939, where available, are presented in table 2. The June and July figures, where given, may differ in some instances from those previously published, because of revisions necessitated primarily by the inclusion of late reports.

The average weekly earnings shown in tables 1 and 2 are computed by dividing the total weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As not all reporting establishments supply man-hours, average hours worked per week and average hourly earnings are necessarily based on data furnished by a smaller number of reporting firms. The size and composition of the reporting sample varies slightly from month to Therefore the average hours per week, average hourly earnings, and average weekly earnings shown are not strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movement of earnings and hours over the period shown. changes from the preceding month, expressed as percentages, are based on identical lists of firms for the 2 months, but the changes from August 1938 are computed from chain indexes based on the month-to-month percentage changes.

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Machine tools

TABLE 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, August 1939

# MANUFACTURING

[Indexes are based on 3-year average, 1923-25=100. New series adjusted to 1937 Census of Manufactures for all industries except automobiles. Not comparable to indexes published in July or earlier issues of pamphlet. Comparable series available upon request]

		Emple	Employment			Pay	Pay rolls		Ave	Average weekly earnings 1	kly	Average worke	Average hours worked per week i	Average	Average hourly earnings 1
Industry	Indexes, Au 1939	ss, August 1939	[5]	Percentage hange from—	Indexes,	Indexes, August 1939	ਹ	Percentage hange from—	to more	Percentage change from-	1 .1		Per-	1	Per-
	Old series	New	July 1939	August 1938	Old	New series	July 1939	August 1938	1930	July 1939	August 1938	1939 1939	from July 1939	1930 1930	from July 1939
All manufacturing Durable goods Nondurable goods	83.1 83.3 102.5	96.4 84.1 108.1	+++ 1.1.4 1.8.4	++8.6	89.8 97.0	89.8 81.6 99.0	+++ 8.5.7.0 4.03.5	++ 29.88 6.89	824. 53 27. 94 21. 60	++5.7	+11.3	38.0 38.3	++8.1	Cents 63.9 71.6 57.9	0.1
Durable goods Iron and steel and their products, not including															
machinery Blast furnaces, steel works, and rolling mills. Boat-from blue Cast-from blue	93.5 93.5 70.0	98.0 96.0 75.0	++++	+12.4	90 90 90 90 94 90 90 90 90 90 90 90	92.5 104.0 67.9	++125.1 +25.1 +3.25.1	++37.6 ++22.1 +20.4	28. 13 30. 13 26. 17	+10.8 +19.8 +2.3	+++ + 20.8 + 20.8	35.0 38.0 4.7	+19.8 +19.8	28.8 68.4.8 0.9.4.0 0.9.4.0	11++
Cutlery (not including silver and plated cutlery) and edge tools. Forgings, iron and steel Hardware	85.0 49.1			++14-1	74.9 48.6	79.5 59.4	++4.4	+++23.0 +41.0		1+6.1	+19.1 +13.1	388.1	+ + + + 2 2	59.8 76.0	24.4
Plumbers' supplies. Stamped and enameled ware	76.7			+21.7	71.4	71.1	+11.2	+24.6	26.43	+7.4	+18.9		++6.5	68.0	11.2
Stores Structural and ornamental metalwork Tin cans and other tinware	72.3 85.2 72.2 102.1	78.4 90.2 71.5 107.4	++5.5 +7.1	+1257 +287 +277	63.5 71.1 66.2 113.2	67.9 77.7 64.2 114.9	+ 11.7	+14.5 +29.3 +5.8	26.47 24.78 24.20	4+++	++3.1 +3.1 +3.1	37.9 37.7 39.6 39.9	++++ 17.14+ 604	69.0 66.0 72.8 60.8	++1.1++
Machinery, not including edge tools, machine tools, Virework.  Machinery, not including transportation equipment.  Agricultural implements (including tractors).	83.8 122.9 96.7	83.5 116.1 96.8 114.4	+1-1-1 1.13 1.33 1.33 1.33	++15.7 +15.2 +9.7	81.4 127.0 97.9	79.4 115.5 96.9 124.0	+10.0 +48.1 +1.1	+29.1 +27.3 +28.9 +21.2	23.97 24.76 28.07 29.11	++1.0	+11.1 +10.1 +10.6	38.6 36.8 39.0 37.4	++++ 252+ 252	62.3 67.4 78.1	+-!!!
Cash registers, adding machines, and calculating machines.  Electrical machinery, apparatus, and supplies	126.6 87.1	124.6	+1.1	-6.2 +17.6	118.4	119.4	-3.0	+32.5	30, 23	-1.0	+4.8	37.0	+2.7	82, 2	+;
Engines, turbines, water wheels, and wind-mills. Foundry and machine-shop products.	97. 4	96.8	++.6	+17.9	116.7	113.5	+4.8	+29.8	31. 01 27. 78	+2.3	+9.9	38.8	+2.4	77.8	0 1

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97. 4

Engines, turbines, water wheels, and windmills.

Foundry and machine-shop products.

See footnotes at end of table.

Table 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, August 1939—Continued

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Series   1939   1938   1938   1939   1938   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939   1939	s-Continued	Old		Percei change	rom-	Indexes,	August 39	Perce	entage from—		Perce	ntage from-		-	Angnet	Per-
14.0   10.0   1.1   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.2   1.	es.—Continued		New		August 1938	Old	New	July 1939	August 1938	1939 1939	July 1939	August 1938	-		1939	from July 1939
94.6         100.8         +1.1         +2.0         79.4         85.1         +1.8         +2.8         81.5         +1.9         +2.8         81.5         +1.9         +2.8         41.5         +2.8         83.5         +1.9         +2.8         +2.8         +1.9         +2.8         +2.8         +2.9         +1.5         +2.8         40.5         +2.8         +3.8         +3.8         +3.8         +1.9         +2.9         +1.5         +2.8         40.5         +2.8         +1.9         +2.8         +2.8         +1.9         +2.8         +3.8         +3.8         +2.7         +1.7         +2.8         40.5         +2.8         +1.9         +3.8         +3.8         +2.7         +1.7         +2.8         40.5         +2.8         +1.9         48.5         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8         +1.8 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Combe</td><td></td></t<>															Combe	
86.2 8.6.5 -1.1 +8.8 85.5 83.1 +1.9 +4.8 18.5 4.2 +1.7 +2.8 18.5 1.00.1 18.0 18.0 18.0 18.0 18.0 18.0 18		94.6	100.8	+1.1	+3.0	79.4	85.1	+1.8	+ 00	819.65	+0.6		37.4		52.6	+1.0
146.0 147.1 +9.0 +1.1 138.1 135.1 +5.1 +4.0 28.8 3 -3.7 +2.8 40.5 +4.0 50.2 4 11.1 146.2 146.6 -1.6 +1.2 142.2 25.1 143.2 14.1 14.1 14.1 14.1 14.1 14.1 14.1 14	60	84.2	85.5	41.0	10	20.00	83.5	11.8	100	18.54	-+		37.5		49.3	+
282. 296. 4	es. 2 and preserving.	140.0	147.1	+9.0	+1.1	136.1	135.1	+5.1	14.0	23.93	18.7	100	40.5		59.5	1-09
70.0 10.0 1	y and preserving	146.2	146.9	90	+1.2	142.2	135.3	-27	+1.7	25. 49	-2.1	+.6	41.1			(E)+
248.1 289.3 +46.9 -1.8 232.2 251.1 +63.4 +13.6 17.20 +11.3 +15.4 39.4 +11.3 44.7 75.0 78.5 +11.9 +4.8 79.7 74.2 -3.6 +11.3 +15.4 39.4 +11.3 44.7 75.0 78.5 +11.9 +4.8 79.7 74.2 -3.6 +11.3 +15.4 39.4 +11.3 44.7 75.0 98.5 180.2 -1.6 -4.4 5.8 1.8 93.4 +4.5 18.93 +6.8 +4.5 18.93 +6.8 +4.5 18.93 +6.8 +11.8 18.9	g and preserving	107.0	102.0	11.0	000	020.1	330.2	12.4	+1.3	34.74	1.	++	40.4			is
75.0 78.5 +11.9 +4.8 76.0 76.7 +19.5 +9.5 18.93 +6.8 +4.5 17.9 +0.8 60.5 98.5 18.93 +6.8 +4.5 18.93 +6.8 +4.5 19.8 60.5 98.5 100.2 -5.5 +10.8 105.8 -3.6 -1.7 78.9 74.2 -3.6 -1.7 29.2 -1.6 -1.4 42.4 40.4 -2.9 68.8 105.8 +4.7 +10.8 105.8 -3.1 +3.8 25.7 7 -2.7 -1.6 -1.4 40.4 -2.9 68.8 105.8 +4.7 +10.8 105.8 -3.1 +3.8 25.7 -4.4 +1.8 11.0 11.0 +1.4 11.0 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0 +1.1 11.0	lonery	248. 1	289.3	+46.9	17	232. 2	251.1	+63.4	+13.6	17.20	+11.3	+15.4	39.4			11
98.5 100.2		75.0	200	+11.9	4.00	76.0	76.7	+19.5	+9.5	18.93	+6.8	+4.5	37.9			12.4
98.5 100.2 — 5 +4.7 108.8 105.8 — 8.1 +3.8 27.77 — 7 40.4 — 2.0 68.8 100.2 — 6.5.2 100.2 — 6.5.2 100.2 — 6.5.2 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100.2 — 6.5.3 100		01.5	80.8	13.0	11:0	78.7	74.9	1 1 1 8 0	+1.3	20.83	-T.6	1	42.4			10
82.7 88.3 +54.3 +10.8 79.6 88.7 +59.9 +17.6 25.22 +3.6 +6.3 40.1 +21.0 63.8		98. 5	100.2	1.00	+4.7	108.8	105.8	-3.1	+3.8	27.77	-2.7		40.4	12.9		+4.
Snuff		82.7	8000	+54.3	+10.8	79.6	85.7	+59.9	+17.6	25. 22	+3.6		40.1	+21.0		-15.7
Snuff         59.1         60.7         +2.6         -2.2         67.3         -(?)         +2.7         18.04         -2.6         +4.9         34.9         -1.3         51.7           106.0         67.3         +1.9         +2.9         17.30         0         +1.0         37.1         -2.2         46.7           106.1         114.3         +2.4         108.0         +1.0         41.0         41.0         41.0         46.7           107.0         107.0         +1.1         +4.2         +4.6         42.6         +4.6         46.7         +4.6         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46.7         46		65.2	88.0		++1.2	80.0	80.8	++	1-2-	23.05	4.4	1 3 8	36.6	+1.2		-1.7
66.0         67.3         +1.9         +1.9         +2.9         17.30         0         +1.0         37.1         -2.2         46.7         +1.9         +2.9         17.30         0         +1.4         38.1         +1.8         76.4         +1.8         76.4         +1.0         +1.1         41.1         105.1         114.3         +4.2         +1.0         +1.4         92.1         11.1         +1.1         107.6         107.7         +6.4         +5.6         24.65         +2.5         +1.5         39.9         +5.0         61.8         44.4         107.7         +6.4         +5.6         24.65         +2.5         +1.6         44.6         57.7         +2.6         42.6         +2.7         +2.8         +1.7         42.8         42.8         42.6         42.6         42.7         42.8         42.8         42.6         42.6         42.6         42.7         42.8         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6	obacco and snuff	59. 1	60.7	+2.6	-2.2	67.9	67.3	(E)	+25.2	18.04	-2.6	+4.9	34.9	-1.3	51.7	-1.4
102.1   114.3   +4.2   +10.9   111.8   124.6   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9   +14.9	1	66.0		+1.9	+1.9	59.7	62.1	+1.9	+2.9	17.30	0	+1.0	37. 1	1.	46.7	6
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$		21.5		100		135.8	135.9	+3.4	-1.6	34.76		-1.4	35.8	+3.3	97.5	6.1
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	104.5		1.00	13	114.5	113.6	0	14.0	27. 17	+1.8	+4.4	39.6	+1.1	68.6	+
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0.090	~ 60	+14.9	-21.9	119.2	118.0	+13.9	124.8	23.84	1	13.0	30.0	+-	50.0	11
Varnishes 117.2 122.1 -(3) +6.0 123.2 125.6 +1.2 +10.8 28.47 +1.3 +4.6 40.3 +.7 70.7 allied products 266.1 255.1 -14.1 -9.5 269.4 246.6 -12.9 -6.8 24.81 +1.4 +3.0 38.6 +.8 64.3	1	89.4	200	+23	+9.1	104.2	100.1	+6.2	+11.8	32, 20		+2.5	40.2	+4.7	80.2	1
ducts 266.1 255.1 -14.1 -9.5 269.4 246.6 -12.9 -6.8 24.81 +1.4 +3.0 38.6 +.8 64.3			0-	+,6	4.4	62. 4	62.7	1.5	14.0	17.26		7.2	35,8	-1.5	48, 3	1-
The same of the sa	ducts	117.2		-14.1	000	269.4	246.6	-12.9		24.81		+3.0	38.6	- 00	64.3	+.6

2. 11.7 | 1.4 | 1.8 | 3.4 | +.5 | +27.0 | 28.44 | +.5 | +11.2 | 36.9 | +1.4 | 77.1 | -...

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++1

+1.4 +3.0 38.6 -1.5 +1.3 39.6

266.1 255.1 -14.1 -9.5 269.4 246.6 -12.9 -6.8 28.9 96.5 88.0 +4.9 +6.4 98.3 102.3 +3.3 +7.8 28.98

Soap

# NONMANUFACTURING

[Indexes are based on 12-month average, 1929=100]

	H	Employment	ent		Pay rolls		Average	weekly	Average weekly earnings	Avera	Average hours worked per week	worked	Averag	A verage hourly earnings	earnin
Industry	Index,	Perce	Percentage lange from	Index,	Percentage change from	Percentage	Au-	Percentage change from-	entage from-	Au-	Percentage change from-	ntage from—	-ny	Perce	Percentage change from-
	gust 1939	July 1939	August 1938	gust 1939	July 1939	August 1938	1939 1939	July 1939	August 1938	1939 1939	July 1939	August 1938	1930 1930	July 1939	August 1938
Coal mining: Anthracite		90 c	+29.2	33.3	+32.2	+66.3	\$22.96	+21.5	+28.6	83.8	+17.0	+24.4	Cents 93.3	-0.2	+2
Metalliterous minng Quarrying and nonmetallic mining Crude-petroleum producing	66.225 66.6225	+2.0 +1.3 -1.0	+17.1 +8.1 -8.0	61.8 61.8	1.9.7	+10.0 +21.8 +9.5 -7.5	32.38 33.88 83.88	+10.1 +3.6 +7.7	+++++	39.3 38.5 38.5	++++	+1-1-	88.05.0 88.05.0	1-1-1	1 4 4 4
Public utilities: Telephone and telegraph 4	75.6	+.2	+1.1	95.2	+.6	1.3	30.20	+.4	+3.2	39.2	+.6	+2.3	80.3	(2)	+
Electric light and power and manufactured gas	93.8	+.6	+1.2	101.0	+1.0	+2.1	33.87	+.4	+.9	39.9	+3.3	00.	85.1	-2.5	+1.
Electric-railroad and motorbus operation and maintenance	8.69	+.2	+.5	6 02	+.5	+2.1	33, 20	+.3	+1.6	46.0	+.6	+1.8	71.4	65	ľ
Trade: Wholesale	89.0	+1.2	+1.5	76.1	+.	+3.3	29.76	100	+1.7	41.9	+1.4	00 4	71.0	-2.4	+-
General merchandising 4 Other than general merchandising 4	80.8	-2.1	100	81.1	1031	175	18.07	-1.1	1.0	38.5	-1+	111	50.1	+(3)	++
Hotels (year-round) 3 4 5	89.0	4.00	1.4	79.4	+-6-	1 + 2 6	15, 13	+1	+43.	46.9	1-1-6	-00	32.3	+1	+55
Dyeing and cleaning *	102.6	-3.7	600	73.0	-5.2	-1.6	19.45	-1.6	+	41.6	-1.6	-2.0	48.3	+5	+5
Brokerage Insurance	00	++	+1.1	000	1.6	+15.0	34. 43	1.70	+ 5	008	33	EE-	000	DE-	EE.

Average weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments, as not all reporting firms furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample. Hours and earnings for all manufacturing industries relate to 90 industries instead of 87 which were covered in the July and prior issues of the pamphlet, due to the separation of the knit goods industry into its four component divisions.

<sup>3</sup> Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of Employment and Pay Rolls pamphlet.

<sup>4</sup> Average weekly earnings, hourlyearnings, and hours not strictly comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

<sup>5</sup> Cash payments only; the additional value of board, room, and tips cannot be computed.

<sup>6</sup> Not available.

64.0

65.8

64.1

40.5

36.0

40.1

73.4 | 26.47 | 26.63 | 26.70

74.7

TABLE 2.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, June, July, and August 1939

## MANUFACTURING

[Indexes are based on 3-year average, 1923-25=100, and are adjusted to 1937 Census of Manufactures for all industries except automobiles. Not comparable to indexes published in July or earlier issues of pamphlet. Comparable series available upon request]

Two describers	Emp	Employment index	index	Pa	Pay-roll index	lex	Avera	Average weekly ings 1	y earn-	Averag	Average hours worked psr week 1	vorked	Averag	Average hourly ings 1	earn-
Cooper	August 1939	July 1939	June 1939	August 1939	July 1939	June 1939	August 1939	July 1939	June 1939	August 1939	July 1939	June 1939	August 1939	July 1939	June 1939
All manufacturing.  Durable goods.  Nondurable goods.	96.4 84.1 108.1	93.5 83.0 103.5	93.4 84.6 101.8	89.8 81.6 99.0	94.4 76.1	86.5 80.7 93.0	\$24.53 27.94 21.60	\$23.71 26.44 21.27	\$94.23 27.36 21.33	38.0 38.3	36.6 36.1 37.0	37.8	Cents 68.9 71.6 57.9	Cents 64. 3 71. 8 58. 1	Cents 72.4 58.2
Durable goods															
Iron and steel and their products, not including machinery	92.3			87.8						37.0			75.6		
Blast furnaces, steel works, and rolling mills Bolts, nuts, washers, and rivets	97.0	95.3	95.7	92.5	82. 0 83. 1	95.9	30, 13	27. 12 21. 79	23.30	38.0	32.1	33.6	84.4	84.0	84.2
Cast-fron pipe	75.3			62.9						37.4			58.0		
(not including	92.1	86.5	90.4	79.5	76.1										
Hardware.	75.6	69.0	72.1	79.8	65.4										
Plumbers' supplies Stamped and enameled ware	151.9	76.7	147.3	71.1	137.4	67.5	23.51	24. 70	25, 56	38.0	36.8	38.1	68.0	67.3	67.1
Steam and hot-water heating apparatus and steam fittings	78.4	75.7	75.0	67.8											
Stoves	90.2	855.05	87.5	77.7	72.7	76.9	24. 78	24. 43	25.20	37.7	37.0	37.9	66.0	66.1	66.6
Tin cans and other tinware	107.4			114.9											
Tools (not including edge tools, machine tools,	200	70 7	83 7		29.9	70.4									
Wirework	116.1	125.9	136.3		124.0	138.4									
Machinery, not including transportation equipment. Agricultural implements (including tractors)	96.8	95.7	95.6	124.0	122.7	95.4	29. 11	29, 20	28.85	37. 4	38.0	38.6	79.1	78.7	72.5
Cash registers, adding machines, and calculating machines  Electrical machinery, apparatus, and supplies	124.6	127. 2	128.3 86.5	119.4	123.0	124.5	30, 23	30.52	30.62	37.0	37.5	37.6	82.2	81.8	82.1
Engines, turbines, water wheels, and wind- mills	96.8						31.01	30,36	30.57	40.1		38.3	77.8		78.2
Foundry and magnine-snop produces Machine tools.  Radios and phonographs	140.3	147.4	144.8	122 8	165.7	165.6	22, 38	31, 23	31.78	38.0	41.8	37. 2	74.6	74.8	75.0

78.2 71.6 75.0 58.3

77.9 71.6 74.8 57.6

77.8 71.5 74.6

38.7 38.7 37.2 37.2

76 9 27.78 28.95 27.71 38.8 37.6 104.5 22.38 21.71 21.63 38.9 37.7

Machine bools. 140.3 147.4 144.8 160.9 162.9 163.7 Redios and phonographs. 185.9 129.6 119.8 112.8 113.6

Trend	of Employmen	nt and Pay Rolls	125
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See footnotes at end of table.

TABLE 2.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, June, July, and August 1939—Continued

# MANUFACTURING—Continued

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100.8   99.7   94.1   85.1   83.6   74.6   819.72   818.65   87.4   87.5   85.5   84.5   85.5   83.5   82.0   82.2   24.8   82.6   24.8   83.5   82.0   82.2   82.8   82.8   82.2   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82.8   82	85.5 89.7 94.1 82.5 84.6 84.1 82.5 85.5 84.1 82.5 84.1 82.5 84.5 84.1 82.5 82.5 82.5 82.5 82.5 82.5 82.5 82.5													
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146.0   147.8   147.8   147.8   148.0   148.0   148.0   148.0   148.0   148.0   147.8   148.0   147.8   148.0   147.8   148.0   147.8   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.0   148.	146.1 145.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0 147.0	200	_	82.0	82.2	24.29	23.96	24.30	38.6	38.0	38. 7	_	62.9	63.0
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102.9         103.0         103.1         86.7         88.8         87.3         22.57         22.96         22.63         47.2         48.0         47.7           289.3         197.0         141.2         251.1         153.7         100.3         17.20         15.49         15.54         33.4         34.0         34.2           79.9         82.5         70.2         76.8         80.4         77.0         15.49         15.54         33.4         34.0         34.2         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0         34.0	289.3 103.9 103.0 141 78.5 7 70.2 772 78.6 70.2 772 89.4 92.7 792 88.3 57.2 992 88.3 57.2 54 66.6 65.4 65 67.3 66.1 65 110.9 110.1 109 112.0 111.9 114.3 105.8 105.8 105.8 105.8 105.8 105.8 105.8 105.8 105.8 105.8 105.8 105.8 105.8 105.8 105.8 120.1 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0 111.0	1 298	_	359.0	355.3	34, 74	34.93	34.78	40.4	40.7	40.2	_	88.8	01.0
289.3         197.0         141.2         251.1         153.7         110.3         17.20         15.54         39.4         34.6         34.2           78.6         70.2         77.2         76.7         66.1         18.93         17.06         18.52         37.9         34.0         36.6         34.2         46.8         46.8         47.1         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8         46.8	289.3 197.0 141 78.5 70.2 72 79.9 82.7 70.2 72 89.4 92.7 99 88.3 57.2 99 88.3 57.2 99 88.3 66.4 66. 60.7 59.1 100.7 100.8 111.0 110.9 110.1 100.8 112.0 111.0 114.3 109.7 109.8 112.0 111.0 114.3 109.7 109.8 112.0 111.0 114.3 109.8 112.0 111.0 114.3 119.1 114.3 119.1 114.3 119.1 114.3 119.1 114.3 119.1 114.3 119.1 114.3 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.1 119.	9 103	_	80	87.3	22. 57	22, 96	22. 63	47.2	48.0	47.7	_	48.0	47.3
78.5         70.2         76.8         70.2         76.8         70.2         76.8         76.8         76.9         11.6         76.8         77.0         76.8         77.0         76.8         77.0         76.8         77.0         76.8         77.0         76.2         20.20         20.20         20.3         22.4         46.8         47.5         47.1           100.2         100.2         7.0         76.2         20.20         20.20         22.2         40.4         41.6         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         40.9         <	78.5 70.2 772.6 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 772.8 82.5 7	0 141	_	153.7	110.3	17. 20	15.49	15.54	39.4	34. 6	34. 2	_	44.5	46.4
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88.3 57.2 54.2 56.2 56.2 22.3 96 27.89 40.1 32.6 41.1 32.6 57.8 59.6 57.8 59.6 57.8 59.6 57.8 59.6 57.8 59.6 57.8 59.6 57.8 59.6 57.8 59.6 57.8 59.6 57.8 59.6 57.8 59.6 57.8 59.6 57.8 59.6 57.8 59.8 59.8 59.8 59.8 59.8 59.8 59.8 59	88.3 57.2 54. 88.6 66.6 65.4 65. 8nuff 60.7 58.1 60. 110.9 110.1 100. 112.0 1110.4 100. 112.7 121.8 120. 115.7 105.8 120. 115.7 105.8 120. 115.7 111.9 114. 115.7 117.1 116. 115.7 117.1 116. 115.7 117.1 116. 119.1 117.1 116. 103.3 105.9 108.	2 89		109.2	106.7	27.77	28. 54	28, 25	40.4	41.6	40.9		68.7	69.1
98.6         97.9         91.0         80.8         80.6         77.2         23.05         23.15         23.8         73.6         36.9         36.1         37.0         36.9         36.1         36.0         36.1         37.0         36.9         36.9         37.0         37.2         36.9         37.0         37.2         36.9         37.0         37.2         36.9         37.0         37.2         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.9         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         36.0         <	88.6 65.4 65.5 65.4 65.5 65.1 10.0 110.1 110.4 110.4 110.4 110.4 110.4 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 1	2	_	53.6	59.2	25, 22	23.96	27,89	40.1	32. 5	41.1		75.7	70.0
Signal         Oct. 7         Signal         Oct. 7         Oct. 7<	8muff 60.7 59.1 60.1 65.1 10.0 110.1 10.0 110.1 10.0 110.1 10.0 110.1 10.0 110.1 10.0 110.1 10.0 110.1 112.0 111.0 111.0 111.0 110.0 110.0 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1 110.1	91.		80.6	77.2	23.05	23, 15	23.87	36.6	36.1	37.0		64.1	64. 5
67.3         66.1         65.7         62.1         61.0         60.4         17.30         17.17         37.1         37.2         36.9           110.9         110.1         106.1         106.7         106.0         103.6         28.04         27.57         28.10         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0	67.3 66.1 65. 110.9 110.1 100. 114.3 109.7 103.7 109. 107.0 105.8 106. 108.1 111.9 114. 112.0 111.9 114. 122.7 121.8 120. 105.7 107.6 107. 119.1 1116. 116.1 117.1 116. 107.3 105.9 108.	9		67.3	65.1	18.04	18 52	17.95	34.0	35.0	33.0		47.6 59.4	£7.4
110.9         110.1         100.6         100.7         100.0         100.1         100.6         100.7         100.0         100.1         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0         100.0 <th< td=""><td>110.9 110.1 109. 110.1 109. 1114.3 109.7 108.8 106. 8 106. 8 106. 8 106. 112.0 111.9 114. 108. 122.7 121.8 120. 105.7 107.6 107. 119.1 1116. 116. 116. 116. 116. 116. 1</td><td>1 65</td><td></td><td>61.0</td><td>60.4</td><td>17.30</td><td>17.26</td><td>17.17</td><td>37.1</td><td>37.2</td><td>36.9</td><td></td><td>47.0</td><td>47.0</td></th<>	110.9 110.1 109. 110.1 109. 1114.3 109.7 108.8 106. 8 106. 8 106. 8 106. 112.0 111.9 114. 108. 122.7 121.8 120. 105.7 107.6 107. 119.1 1116. 116. 116. 116. 116. 116. 1	1 65		61.0	60.4	17.30	17.26	17.17	37.1	37.2	36.9		47.0	47.0
114,3         109,7         108,2         124,6         117,6         21,71         21,15         40,2         38,9         39,8           107,0         105,8         106,1         107,7         101,2         104,5         24,65         23,40         24,13         39,9         38,9         39,0           112,0         105,8         106,1         110,4         102,2         102,2         105,7         36,7         36,7         36,7         36,9         37,2         38,1         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0         38,0	114.3 109.7 108. 107.0 105.8 106. 98.3 99.1 96. 112.0 111.9 114. 122.7 121.8 120. 105.7 107.6 107. 119.1 117.1 116. 56.7 49.3 54. 107.3 105.9 108.	1 100		102.0	103. 5	28.04	27. 57	28, 10	38.1	37.5	38.1		77.0	77.0
107.0         105.8         106.1         107.7         101.2         104.5         24.65         23.40         24.13         39.9         38.0         38.3         38.1         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         38.0         39.0         39.0         39.0         39.0         39.0         39.0         39.0         39.0         39.0         39.0         39.0         39.0         39.0         39.0         39.0	98.3 99.1 96. 114. 116. 114. 119. 114. 119. 119. 119. 119. 119	7 108.		116.5	117.6	21.71	21, 19	21, 75	40.2	38.9	39.8		54.8	55, 1
98.3 99.1 96.5 83.4 85.6 83.7 29.78 30.16 30.28 37.8 38.3 38.1 79  112.0 111.9 114.0 102.2 102.2 105.7 36.75 36.78 37.28 35.7 35.5 36.0 99  112.1 110.4 100.8 118.9 117.8 118.7 28.89 29.37 38.6 37.9 36.0 99  112.7 122.7 121.8 120.5 135.9 131.5 134.4 38.91 34.76 34.99 35.8 34.7 36.1 97.8 118.1 116.5 136.1 130.8 131.5 131.5 31.63 30.74 31.07 40.1 39.3 40.0 7.8 118.9 117.9 118.7 28.81 30.74 31.07 40.1 39.3 40.0 7.8 118.9 117.9 118.7 22.84 24.95 39.9 30.97 30.92 30.8 38.8 38.8 38.8 38.8 38.8 38.8 38.8	98.3 99.1 96. 1112.0 1114.9 1144. 108. 122.7 121.8 120. 120.7 107.6 107.3 105.9 108. 108. 107.3 105.9 108. 108. 108. 108. 108. 108. 108. 108.	8 100		101.2	104.5	24. 65	23.40	24, 13	36.8	38.0	38.0		61.6	61.8
112.0         111.9         114.0         102.2         102.2         105.7         36.75         36.78         37.28         35.7         36.1         36.1         36.1         36.1         36.1         36.1         36.1         36.1         36.1         36.1         36.1         36.1         36.1         36.1         36.1         36.1         36.1         37.2         36.1         37.2         36.1         37.9         36.1         37.9         37.9         36.1         37.9         37.9         37.2         36.1         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         36.1         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9         37.9	112.0 111.9 114. 109.1 110.4 109. 122.7 121.8 120. 105.7 107.6 107. 119.1 117.1 116. 107.3 105.9 108. 107.3 105.9 108.	1 98	83 4	855 6	83 7		30 18	30 98	27 9	20 2	20 3	202	6 00	00
109.1         110.4         109.8         118.9         117.8         118.7         29.64         28.96         29.87         38.6         37.9         38.6         77.7           122.7         121.8         120.5         135.9         131.5         134.4         34.76         33.91         34.99         35.8         34.7         36.1         97.           105.7         107.6         107.2         113.6         113.9         113.6         13.6         133.9         27.17         26.7         39.6         39.1         39.3         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         78.         40.0         70.0         78.         70.0         70.0         70.0         70.0         70.0         70.0         70	109.1 110.4 100. 122.7 121.8 120. 105.7 107.6 107. 119.1 117.1 116. 107.3 105.9 108.	9 114	102.2	102.2	105.7		36. 78	37.28	35.7	35.00	36.0	00.00	1001	000
efining——————————————————————————————————	efining 122.7 121.8 120. efining 105.7 107.6 107. ke, and meal 56.7 49.3 54. ions 105.9 108.	4 100.	118.9	117.8	118.7		28.90	29.37	38. 6	87.9	98.5	77.0	77.0	76.9
119.1 117.1 116.5 113.6 113.9 27.17 28.71 28.79 39.6 39.1 39.5 68.  119.1 117.1 116.5 136.1 130.8 131.5 31.63 30.74 31.07 40.1 39.3 40.0 78.  119.1 117.1 116.5 136.1 130.8 131.5 31.63 30.74 31.07 40.1 39.3 40.0 78.  107.3 105.9 108.3 113.9 117.9 118.7 23.84 23.92 24.95 39.9 40.5 39.9 40.1 39.3 40.0 30.97 30.97 30.92 40.2 38.4 38.4 80.  108.3 118.9 11.2 1 102.8 100.9 32.20 30.97 30.92 36.8 38.4 38.4 80.  119.1 122.1 122.2 122.2 124.3 125.6 124.0 128.9 28.47 28.47 28.85 40.3 40.0 41.1 70.0 38.5 38.5 38.8 37.9 64.1	meal 107.3 107.6 107. 116. 116. 116. 116. 116. 116. 116. 11	8 120.	135.9	131.5	134.4		33.91	34, 99	35.8	34.7	36.1	97.5	98. 5	97.2
119.1         117.1         116.5         136.1         131.5         31.63         30.74         31.07         40.1         39.3         40.0         78.3           66.7         49.3         54.3         47.5         113.6         13.55         13.37         42.3         41.1         42.2         31.0         93.3         41.1         42.2         31.0         93.3         44.1         42.2         31.0         93.3         44.1         42.2         31.0         93.3         44.1         42.2         31.0         93.3         44.1         42.2         31.0         93.3         44.1         42.2         31.0         93.3         44.1         42.2         31.0         93.3         44.1         42.2         31.0         93.8         43.3         44.1         42.2         31.0         93.8         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0         50.0	56.7 49.3 54. 107.3 105.9 108. 03.2 01.1 80	6 107.	113.6	113.6	113.9		26. 71	26. 79	39.6	39, 1	39. 2	68.6	68, 5	68.0
06,7         49,8         54,5         41,7         45,4         13,69         13,55         13,37         42,3         41,1         42,2         31,69           107,3         105,9         108,9         118,9         118,7         23,84         23,84         39,9         39,9         40,5         39,8         59,8           93,3         91,1         89,7         100,9         102,8         100,9         32,20         30,92         40,2         38,4         38,8         59,9         40,5         58,4         38,4         80,7         40,2         38,4         38,4         48,8         40,5         40,2         36,4         48,8         40,0         40,3         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0         40,0	107.3 105.9 108.	1 116.	136, 1	130.8	131.5		30.74	31.07	40.1	39, 3	40.0	78.9	78.3	77.7
105. 3 105. 4 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 105. 5 10	08rations	54.	47.5	41.7	45.4		13. 55	13, 37	42.3	41.1	42, 2	31.0	31, 3	30, 5
73.9 73.4 78.9 62.7 63.4 64.9 17.26 17.65 18.79 35.8 38.4 35.4 48.1 70.0 17.20 122.1 122.2 124.3 125.6 124.0 128.9 28.47 28.14 28.62 40.3 40.0 41.1 70.0 122.1 20.7 24.8 26.4 40.3 40.0 41.1 70.0 122.1 20.7 24.8 26.4 26.8 28.4 28.8 24.8 38.6 38.8 38.9 64.1 70.0 122.1 20.7 24.8 26.8 28.8 28.8 28.8 38.8 38.9 64.1 70.0 122.1 20.7 24.8 24.8 24.8 24.8 24.8 24.8 24.8 24.8		108.	118.9	10000	118.7		23.92	24, 95	39.0	40.5	39, 8	59.9	59, 5	59, 2
122.1 122.2 124.3 125.6 124.0 128.9 28.47 28.14 28.62 40.3 40.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41.1 70.0 41	70.0 0.00	70.	69.7	102.0	84.0		17 65	16 70	25.02	26.4	25.4	40.2	40.7	30.6
255 1 297 0 286 2 283 2 271 8 24.81 24.47 24.38 38.6 38.3 37.9 64.	122.1 122.2 124.	2 124.	125.6	124.0	128.9		28.14	28. 62	40,3	40.0	41.1	70.7	70.4	69.7
#U.S. # 100 0 00 0 00 00 00 00 00 00 00 00 00 0	a and allied products	0 286.	246.6	283, 2	271.8		24. 47	24.38	38.6	38.3	37.9	64.3	63.9	64.3

Rubber products. Rubber boots and shoes. Rubber tires and inner tubes. Rubber goods, other	82, 6 58, 5 68, 3 132, 9	78.7 45.2 66.6 130.7	60.1 56.1 66.2 129.3	86.0 58.4 78.5 127.1	81. 5 42. 5 77. 1 121. 4	82.1 55.4 74.8 121.9	28. 44 22. 92 33. 73 23. 23	28. 22 21. 61 33. 84 22. 47	27. 88 22. 69 33. 06 22. 77	38. 37.38 38.23 88.23 88.23	36.4 35.7 37.6	36. 5 34. 9 38. 1	77.1 61.5 96.2 60.5	60.5 95.6 95.6	76.5 60.8 94.7 60.3
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Soap 86.0 286.2 246.6 283.2 86.0 81.9 79.6 102.3 99.0

# NONMANUFACTURING

[Indexes are based on 12-month average, 1929=100]

Coal mining:	04						_				6 06				8 60
Bituminous 2	81.5	79.4	78.3	74.9	64.5	66. 5	24.96	22.03	22, 75	27.7	24.4	25.2	89.4	89.2	88.6
Metalliferous mining	60.2	60.4					-				36, 4				69. 5
Quarrying and nonmetallic mining	48.2	47.5									39.0				54.9
Crude-petroleum producing	9.99	67.3					-				37.7				86.7
Public utilities:	78.0	9 24									30 4		80 8	200	81.4
Electric light and power and manufactured gas 1	93.0	93.2	92.3	101.0	100.0	100.2	33.87	33, 48	33.89	39. 9	38.7	40.2	85.1	86.4	84.4
Electric-railroad and motorbus operation and	0 00	1 00												71 4	
maintenance	09.8	0.8.7	68.80	6.07	0.0	71.2	33.20	33.02	33, 21	40.0	40.8	40. 2	(1.4	41.4	1.17
Trade: VV holesele 3	80 0	87 0	88 1	76.1	75.8		92 06			41.9				72.6	71.5
	82. 5	83.6	86.4	69.4	70.9	72.5	21.39	21.58	21.36	42.8	42.6	42.7	55.3	55.7	55, 1
General merchandising 3	89.8	91.7	97.4	81.1	83.8		18.07			38. 5					48.7
Other than general merchandising 3	80.6	81.5	83. 5	67.0	68.2		23, 99			44.0					57.1
Hotels (year-round) 2 2 4	89.8	90.3	92.8	79.4	79. 1		15.13			46.9					32.6
Laundries ?	99.2	100.0	98.7	86.0	88.0		17.60			42.9					41.9
Dyeing and cleaning 1	102. 6		110.1	73.0	77. 1		19,45			41.6					49.1
Brokerage 3 8	+-	-1.5	-2.0	-1.7	-2.1		35, 17			0	0	0	0	9	0
Insurance	1.2	+.6	+.4	9.1	-1.2		34, 43			0	0	0	0	0	(6)
Building construction 5.	÷.	+4.5	+1.4	+1.2	+4.6		30.91			33. 5	33. 6	33. 4	92. 4	92.0	92.8

by a smaller number of establishments, as not all reporting firms furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample. Hours and earnings for all manufacturing industries relate to 90 industries instead of 87 which were covered in the July and prior issues of the pamphlet, due to the separation of the knit goods industry into its four component divisions. <sup>1</sup> A verage weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied lishments.

<sup>2</sup> Indexes adjusted to 1935 census. Comparable series back to January 1929 presented

In January 1938 issue of Employment and Pay Rolls pamphlet.

<sup>3</sup> Average weekly earnings, hourly earnings, and hours not strictly comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers,

executives, and other employees whose duties are mainly supervisory.

Cash payments only, the additional value of board, room, and tips cannot be computed. Indexes of employment and pay rolls are not available, percentage changes from preceding month substituted.

Not available.

#### INDEXES OF EMPLOYMENT AND PAY ROLLS

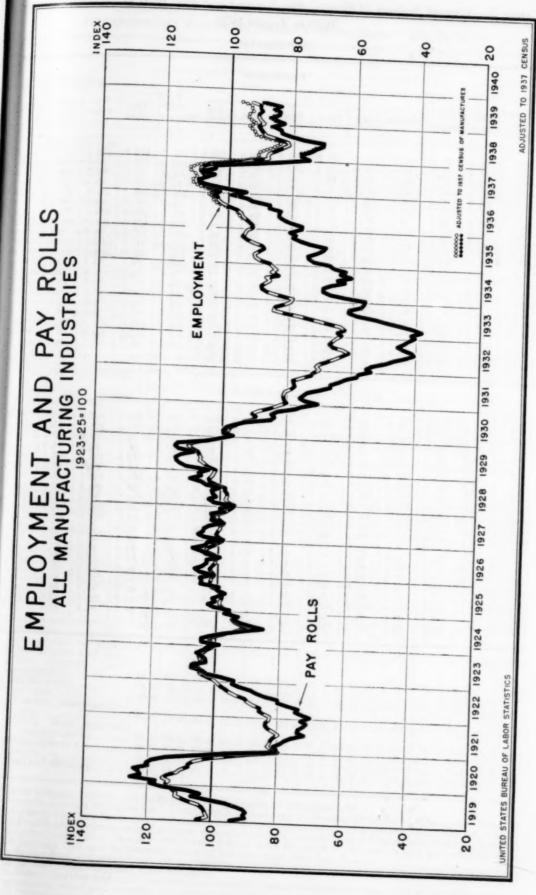
General indexes of factory employment and pay rolls, adjusted to the 1937 Census of Manufactures, are given in table 3 for the months January 1919 to August 1939. They supersede the previously published series, which was adjusted only to 1935 census figures. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to August 1939 as shown by the adjusted indexes and by the former series of indexes.

Indexes of employment and pay rolls are given in table 4 for all manufacturing industries combined, for the durable- and-nondurable-goods groups of manufacturing industries, and for each of 13 non-manufacturing industries, including 2 subgroups under retail trade, by months, from August 1938 to August 1939, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to August 1939.

The indexes of factory employment and pay rolls are based on the 3-year average 1923-25 as 100. They relate to wage earners only and are computed from reports supplied by representative manufacturing establishments in 90 manufacturing industries. These reports cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 90 industries included in the monthly survey of the Bureau of Labor Statistics.

The indexes for the nonmanufacturing industries are based on the 12-month average for 1929 as 100. Figures for mining, laundries, and dyeing and cleaning cover wage earners only, but the figures for public utilities, trade, and hotels relate to all employees except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum production they cover wage earners and the clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from approximately 25 percent for wholesale trade and dyeing and cleaning to approximately 80 percent for quarrying and nonmetallic mining, anthracite mining, and public utilities.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and amount of pay rolls for the pay period ending nearest the 15th of the month.



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6 factory
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Table 3.—General Indexes of Factory Employment and Pay Rolls by Months, January 1919 to August 1939

[1923-1925=100]

TABL

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						Emple	oyment						
Year and month	Janu- ary	Feb- ruary	March	April	May	June	July	Au- gust	Sep- tember	Oc- tober	No- vem- ber	De- cem- ber	Av
1919 1920 1921 1921 1922 1923 1925 1927 1928 1929 1930 1931 1932 1934 1935 1937 1938 1937 1938 1938 1938 1938 1938 1938 1938 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 1939 193	104. 5 114. 3 79. 5 82. 4 100. 2 100. 1 96. 6 95. 3 101. 0 98. 6 95. 3 101. 7 98. 2 80. 1 70. 0 63. 3 78. 8 86. 7 92. 3 104. 7 90. 6 92. 2	101. 2 113. 3 81. 7 84. 5 102. 4 101. 7 98. 3 102. 0 100. 2 97. 2 104. 1 98. 3 80. 8 71. 2 64. 7 83. 7 89. 6 92. 7 107. 6 91. 1 93. 6	101. 7 115. 6 82. 9 85. 8 104. 6 101. 9 99. 2 102. 5 100. 9 98. 2 105. 4 97. 9 81. 2 70. 1 62. 3 87. 2 91. 0 93. 9 110. 1 90. 6 94. 3	101. 9 114. 0 82. 3 85. 7 105. 1 100. 1 99. 1 101. 3 97. 8 100. 7 97. 8 100. 7 97. 8 67. 8 63. 9 88. 8 81. 2 95. 5 111. 3 88. 5 94. 1	102. 6 111. 1 82. 0 87. 9 105. 2 96. 8 98. 6 100. 8 99. 6 97. 8 106. 5 95. 6 65. 2 66. 8 89. 0 96. 4 111. 5 86. 1	103. 9 110. 1 81. 2 89. 6 105. 7 93. 8 98. 4 100. 8 99. 7 98. 5 106. 8 93. 6 63. 2 71. 6 87. 8 88. 3 97. 0 110. 3 84. 3	106. 6 107. 5 79. 7 90. 5 104. 6 90. 6 98. 3 99. 7 98. 6 98. 4 107. 3 90. 4 77. 7 61. 0 76. 2 86. 3 88. 7 98. 4 110. 9 84. 7 98. 4	109.3 107.4 81.1 93.1 104.8 92.0 100.0 101.8 99.9 101.1 109.2 89.7 77.9 62.7 81.3 87.4 91.7 101.2 112.3 88.8	111. 3 106. 1 83. 0 95. 1 105. 3 94. 2 101. 9 104. 0 101. 2 103. 3 110. 3 90. 7 78. 3 66. 1 85. 0 83. 5 93. 9	110. 9 102. 1 83. 7 96. 6 104. 0 95. 0 102. 6 103. 6 100. 2 103. 5 109. 0 88. 7 75. 5 67. 2 84. 6 85. 9 95. 2 104. 9 110. 3 92. 4	112. 1 95. 6 83. 7 98. 0 102. 8 94. 5 102. 2 101. 6 98. 0 102. 6 104. 6 85. 4 72. 7 66. 3 81. 2 84. 3 94. 6 104. 9	113.9 88.0 82.7 99.1 101.1 101.8 100.3 96.5 102.1 100.7 82.9 72.0 65.1 79.5 85.6 94.2 106.4 97.4	1
				4.4	-5.0	Pay		00.4		******			-
1919	93. 8 119. 1 80. 6 69. 6 93. 9 98. 9 96. 0 101. 6 96. 6 103. 8 96. 5 70. 3 54. 0 40. 3 56. 1 76. 9 94. 6 75. 3 83. 7	89. 3 117. 4 80. 1 72. 5 97. 8 104. 5 101. 0 105. 7 104. 8 102. 0 110. 8 99. 6 74. 4 155. 4 41. 4 62. 9 72. 6 76. 6 100. 1 77. 5 86. 0	90. 0 125. 4 81. 0 74. 4 102. 6 104. 5 102. 8 107. 2 106. 6 103. 5 113. 0 99. 7 75. 9 53. 6 38. 3 67. 2 74. 4 80. 5 105. 9 77. 6	89, 2 122, 3 78, 8 73, 6 103, 8 102, 0 100, 4 104, 9 105, 0 101, 3 114, 1 98, 5 74, 7 49, 6 40, 4 69, 6 74, 6 82, 6 109, 7	90. 1 123. 0 77. 4 77. 0 107. 3 97. 6 101. 4 103. 5 104. 8 102. 3 114. 3 96. 1 73. 6 46. 8 44. 4 69. 7 71. 8 84. 0 110. 1 73. 2	92. 7 124. 4 75. 6 80. 0 107. 2 91. 9 99. 2 103. 7 112. 7 92. 9 69. 9 43. 7 49. 1 69. 8 84. 2 107. 6	95. 6 120. 0 71. 6 80. 2 102. 9 85. 3 97. 5 99. 4 99. 1 100. 2 108. 6 85. 0 66. 6 40. 4 52. 7 62. 8 69. 1 83. 5 105. 2 71. 1	101. 7 120. 6 73. 6 84. 1 103. 1 100. 1 100. 1 103. 8 102. 5 104. 6 113. 5 83. 8 66. 4 41. 4 58. 6 65. 1 74. 0 87. 3 108. 7 77. 3	106. 3 118. 9 73. 3 87. 0 103. 8 92. 4 99. 4 105. 1 106. 2 114. 4 84. 8 63. 8 44. 0 61. 3 60. 8 76. 8 87. 2 104. 9 81. 6	103. 6 114. 4 71. 9 88. 7 105. 9 94. 6 105. 3 108. 0 102. 7 109. 5 113. 7 82. 9 61. 8 45. 8 61. 1 64. 0 79. 5 92. 9 104. 9	107. 8 105. 0 70. 9 92. 2 103. 9 93. 1 105. 1 104. 3 98. 9 106. 2 104. 9 77. 3 58. 3 43. 6 57. 3 62. 5 78. 6 94. 4 93. 3	115. 4 95. 5 72. 7 94. 5 102. 7 97. 6 105. 5 103. 6 100. 0 106. 9 101. 2 57. 8 42. 4 56. 5 66. 2 80. 5 99. 2 84. 6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Table 4.—Indexes of Employment and Pay Rolls in Selected Manufacturing 1 and Nonmanufacturing 2 Industries, August 1938 to August 1939, Inclusive

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108.6 89.

98.0 117.2 75.6 81.2

102.9 96.0 101.1 104.2 102.4 103.5 110.4 89.4 67.8 46.7 50.1 64.5 74.1 85.8

						1	Emplo	ymen	t					
Industry	Av.			1938						19	39			
	1938	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug
Manufacturing														
Durable goods 3 Nondurable goods 4	77.9	72.4	92. 0 75. 9 107. 3	79.7	82.9	83.8	82.3	83. 3	84.1	84.8	84.0	84.6	83.0	84.
Nonmanufacturing														
nthracite miningituminous-coal mining fetalliferous mining uarrying and nonmetallic	86.7	80.1	46. 4 83. 4 55. 2	87.2	88. 6	89.3	88.7	88. 6	87.4	25.9	47.9	51. 2 78. 3 61. 6	79.4	81.
mining. rude-petroleum produc-	42. 3	44. 6	44. 6	44.4	44. 4	41.4	38.3	37.9	40. 1	43.0	45. 6	47.3	47. 5	48.
ingelephone and telegraphlectric light and power,	72. 1 75. 1		71. 5 74. 9	69. 5 74. 7		67. 8 74. 3		66. 4 73. 3		65. 8 74. 1	66. 1 74. 7		67. 3 75. 4	66. 75.
and manufactured gas lectric-railroad and mo- torbus operation and	92. 3	92.7	92.5	92. 5	91. 9	91. 4	90.0	89. 6	89. 5	90. 3	91.0	92.3	93. 2	93.
maintenance	88.8	69. 5 87. 6 80. 0		89. 1		90.0	88. 3	69. 3 87. 9 81. 5	87. 4	87.3	69. 6 87. 2 85. 7	1	69. 7 87. 9 83. 6	89.
other than general	98.0	86. 4	97.0	99. 4	104. 5	144. 1	90.7	88.8	93. 2	96.9	96.8	97.4	91.7	89.
merchandisingear-round hotels aundriesyeing and cleaning	92.7	90.4	81. 5 91. 8 96. 5 107. 8	92. 9 94. 4	92. 5	92.0	91.8	92. 6	92.7	93. 2	93. 9	92.8	90. 3	89.
Manufacturing			1				Pay	rolls		1				1
Durable goods 3	67. 6	63. 1	81. 6 68. 1 96. 7	94.1	92.1	95.4	76. 6 1 92.	0 77. 4 95.	7 79.	79.	78.8	86. 8 8 80. 7 9 93. 0	76.	1 81. 7 99.
Nonmanufacturing	80 (	000		40		10								-
nthracite mining dituminous-coal mining detalliferous mining duarrying and nonmetal-	67.1	64. 2	29. 4 2 71. 9 7 46. 1	78.	81. 4 2 52. 3	1 80.1	78.	2 81.	2 34. 2 77. 4 53.	8 17.	8 20.	0 36. 1 4 66. 8 1 53. 8	64.	
lic mining rude-petroleum produc-	35. 1	39. 2	38. 4	39.	37.	33.	30.	2 29.	7 33.	35.9	9 39.	41.7	40.5	9 43.
elephone and telegraph lectric light and power,	92.	66.8	66. 5 92. 6	63.	63.3 93.6	62. 92.	5 60.9 5 92.	9 62. 0 91.	7 61. 7 91.	60.8 9 92.	8 61. 1 93.	2 62.3 7 93.7	61.9	9 61. 6 95.
and manufactured gas lectric-railroad and mo- torbus operation and	98.	98.9	98.4	99.1	98.	6 98.	95.9	96.	4 96.	96.	9 98.	8 100. 3	2 100.	0 101.
maintenance	74.7	7 73.	68.4 74.3 8 69.4	75.	1 75.	4 75.	7 75.	5 74.	6 74.	7 74.	8 74.	9 75.8	8 75.1	8 76.
other than general	87.	78.	85. 3	88.	91.	122.	9 84.	0 81.	0 83.	4 86.	6 86.	7 88.	1 83.	8 81.
merchandising ear-round hotels aundries eyeing and cleaning	80.	8 77.4 8 83.	3 66. 1 4 78. 9 1 81. 4 3 81. 7	80.1	8 81. 5 79.	3 81. 3 80.	1 80. 0 79.	2 82. 6 78.	8 81.	1 81. 3 79.	9 82. 9 83.	4 82.1	0 79. 9 88.	1 79. 0 86.

<sup>13-</sup>year average, 1923-25=100—adjusted to 1937 Census of Manufactures.
112-month average for 1929=100. Comparable indexes are in November 1934 and subsequent issues of Employment and Pay Rolls, or in February 1935 and subsequent issues of Monthly Labor Review, except for anthracite and bituminous-coal mining, year-round hotels, laundries, and dyeing and cleaning. Indexes for these industries from January 1929 forward have been adjusted to the 1935 census and are presented in the January 1938 and subsequent issues of Employment and Pay Rolls.
Includes: Iron and steel, machinery, transportation equipment, nonferrous metals, lumber and allied products, and stone, clay, and glass products.
Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals, petroleum, and coal products, rubber products, and a number of miscellaneous industries not included in other groups.

### TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES

TABI

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A comparison of employment and pay rolls, by States and geographic divisions, in July and August 1939 is shown in table 5 for all groups combined and for all manufacturing industries combined based on data supplied by reporting establishments. The percentage changes shown, unless otherwise noted, are unweighted—that is, the industries included in the manufacturing group and in the grand total have not been weighted according to their relative importance.

The totals for all manufacturing industries combined included figures for miscellaneous manufacturing industries in addition to the 90 manufacturing industries presented in table 3. The totals for all groups combined include all manufacturing industries, each of the nonmanufacturing industries presented in table 3 (except building construction), and seasonal hotels.

Similar comparisons showing only percentage changes are available in mimeographed form for "All groups combined," for "All manufacturing," for anthracite mining, bituminous-coal mining, metalliferous mining, quarrying and nonmetallic mining, crude-petroleum producing, public utilities, wholesale trade, retail trade, hotels, laundries, dyeing and cleaning, and brokerage and insurance.

Table 5.—Comparison of Employment and Pay Rolls in Identical Establishments in August 1939, by Geographic Divisions and by States

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

		To	tal-all	groups			Ma	nufactu	ring	
Geographic divi- sion and State	Number of establishments	Number on pay roll August 1939	Percentage change from July 1939	Amount of pay roll (1 week) August 1939	Per- cent- age change from July 1939	Num- ber of estab- lish- ments	Num- ber on pay roll August 1939	Percentage change from July 1939	Amount of pay roll (1 week) August 1939	Per- cent- age change from July 1939
New England  Maine  New Hampshire  Vermont  Massachusetts  Rhode Island  Connecticut	10, 648 792 581 449 1 5, 639 838 2, 349	58, 263 35, 876 16, 505 418, 680 86, 669		356, 125 9, 712, 675 1, 781, 111	+1.2 +2.5 +2.1 -2.8 +.3 -6.3 +6.0	282 193 143 1,900 425	634, 625 49, 057 29, 880 9, 911 310, 113 72, 800 162, 864	+3.0 +2.5 -2.1 +1.5 -3.7	582, 241 208, 032 6, 934, 440	+2.6 -3.9 +1.1 -7.6
Middle Atlantic  New York  Pennsylvania  New Jersey	30, 759 19, 294 7, 774 3, 691	2, 023, 344 889, 141 786, 029 348, 174	+.9 +1.6	53, 691, 886 24, 673, 535 20, 011, 161 9, 007, 190	+3.9 +1.2 +7.4 +4.1	2 2, 698 2, 358	1, 239, 803 443, 945 502, 411 293, 447	1-4.2	32, 411, 620 12, 216, 875 12, 610, 687 7, 584, 058	8 +7.
East North Central Ohio Indiana Illinois Michigan Wisconsin	25, 669 7, 571 2, 816 4 6, 740 4, 211 3 4, 331		+1.9 +4.3 +2.3 -1.3	54, 841, 014 13, 934, 828 6, 258, 971 16, 190, 683 12, 186, 762 6, 269, 770	+5.4 +6.8 +6.8 +3.9 +5.6 +4.7	2, 363 1, 051 2, 404 1, 026	1, 482, 930 393, 939 196, 738 403, 213 322, 185 166, 855	+2.9 3 +6.1 +3.1 6	41, 701, 667 11, 008, 576 5, 085, 052 10, 815, 788 10, 471, 435 4, 320, 816	+8. * +8. +6. +6.
West North Central Minnesota Iowa Missouri North Dakota South Dakota Nebraska Kansas	11, 845 7 2, 789 1, 729 3, 011 455 392 1, 031 1 2, 438	59, 265 145, 629 4, 550 5, 939 26, 031	+1.9 +1.3 -2.7	3, 387, 315 113, 419 141, 300 595, 863	+1.8 +3.9 -2.0 +1.4 -3.4 +1.1	647 357 793 28 29 139	219, 580 56, 805 36, 336 88, 769 510 2, 420 9, 315 25, 426	+5.3 +1.9 -3.2 -1.7 -2.5 +2.0	1, 412, 232 389, 640 2, 020, 461 13, 162 61, 128 236, 612	+2. +5. -2. +. -9. +1.

See footnotes at end of table.

TABLE 5.—Comparison of Employment and Pay Rolls in Identical Establishments in August 1939, by Geographic Divisions and by States-Continued

		То	tal—all	groups			Ma	nufactu	ring	
Geographic divi- sion and State	Number of establishments	Number on pay roll August 1939	Percentage change from July 1939	Amount of pay roll (1 week) August 1939	Percentage change from July 1939	Number of establishments	Number on pay roll August 1939	Percentage change from July 1939	Amount of pay roll (1 week) August 1939	Percentage change from July 1939
South Atlantic Delaware Maryland District of Co-	236	829, 686 15, 190 133, 044	+4.0	Dollars 16, 422, 681 351, 474 3, 336, 569	+3.0 -1.0 -3.8		575, 682 11, 054 92, 381	+5.5	Dollars 10, 366, 409 241, 118 2, 331, 620	+2.5 -1.9 33
District of Co- lumbia	1, 719 1, 116 1, 444 745 1, 418	169, 290 83, 323	-1.7 +3.5 +1.6 +2.8 +1.7 +1.9 -1.6	2, 164, 514 3, 369, 569 2, 604, 932 1, 189, 291 1, 784, 349	6 +4.0 +11.8 +5.4 +2.5 +1.4 2	442 205 662 241 385	3, 163 80, 386 49, 677 152, 920 76, 860 89, 578 19, 683	-2.1 +2.7 +2.7 +1.6 +1.9 +2.4 +2.7	2, 328, 720 1, 070, 009 1, 256, 585	-1.1 +3.7 +12.9 +4.9 +3.0 +1.6 +5.0
East South Central_ Kentucky	4, 417 1, 364 1, 328 1, 152	278, 733 72, 240 100, 312 86, 875 19, 306	+.3 2 2 +1.0 +1.1	1, 568, 938	+3.1 +4.8 +1.7 +3.4 +2.0	361 279	180, 657 31, 305 75, 023 61, 648 12, 681	+.2	657, 438 1, 305, 464 1, 012, 518	+.7 +2.5 +3.4
West South Central Arkansas Louislana Oklahoma Texas	11 853 991 1, 215	211, 276 25, 966 53, 738 36, 559 95, 013	+1.0 +2.5 +3.9 -1.2 -(*)	418, 091 1, 045, 497	+2.0 +3.8 +2.3 +.2 +2.2	251 223 140	106, 025 17, 437 29, 307 10, 964 48, 317	+1.8 +2.9 +6.1 -2.4 1+.7	269, 918 530, 776	+4.3
Mountain  Montana Idaho Wyoming Colorado New Mexico Arizona Utah Nevada	577 470 313 1, 118 279 375 540	8, 130 36, 607 5, 996 13, 003 21, 732	-1.0 +1.8 1 +2.5 -2.9 -3.5	453, 303 249, 206 230, 741 918, 490 128, 533 348, 840 486, 300	+6.2 +10.4 +4.1 +6.9 +2.4 +3.3	67 61 37 196 31 38 99	35, 058 4, 475 3, 236 1, 407 14, 782 964 2, 618 7, 236 340	+6.1 -7.1 +3.8 -1.4 +10.8 -1.1 -13.6	114, 213 84, 304 45, 639 389, 696 18, 173 61, 890 157, 582	+6.8 +1.8 +12.9 +4.9 +16.7 +1.4 -4.8
Pacific	2, 352 1, 125	500, 248 86, 818 48, 037	+5.4 +4.1 +5.0	14, 299, 022 2, 309, 899 1, 228, 920 10, 760, 203	+9.2 +11.6	531 288	284, 395 55, 563 31, 863 196, 969	+5.4 +7.6	1, 497, 425 809, 141	+13.1

Includes banks and trust companies; construction, municipal, agricultural, and office employment, amusement and recreation; professional services; and trucking and handling.
 Includes laundering and cleaning; and water, light, and power.
 Weighted percentage change.
 Includes automobile and miscellaneous services; restaurants; and building and contracting.
 Includes construction but not public works.

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+6.3 +5.8 +7.5 +5.1

+6.8 +8.3 \* +8.2 +5.5 +6.2 \* +5.6 +2.6 +5.4 -2.6 +1.1 -9.3 +1.8

Includes automobile and miscellaneous services; restaurants; and building and contracting.
Includes construction but not public works.
Does not include logging.
Includes banks; real estate; pipe line transportation; motor transportation (other than operation and maintenance); water transportation; hospitals and clinics; and personal, business, mechanical repair, and miscellaneous services.
Less than Ho of 1 percent.
Includes financial institutions, miscellaneous services, and restaurants.
Weighted percentage change, including hired farm labor.
Includes automobile dealers and garages; and sand, gravel, and building stone.

#### INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METRO-POLITAN AREAS

A comparison of employment and pay rolls in July and August 1939 is made in table 6 for 13 metropolitan areas each of which had a population of 500,000 or over in 1930. Cities within these areas, but having a population of 100,000 or over, are not included. Footnotes to the table specify which cities are excluded. Data concerning them have been prepared in a supplementary tabulation which is available on request. The figures represent reports from cooperating estab-

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lishments and cover both full- and part-time workers in the manu. facturing and nonmanufacturing industries presented in table 1. with the exception of building construction, and include also miscel. laneous industries.

Revisions made in the figures after they have gone to press, chiefly because of late reports by cooperating firms, are incorporated in the supplementary tabulation mentioned above. This supplementary tabulation covers these 13 metropolitan areas as well as other metropolitan areas and cities having a population of 100,000 or more. according to the 1930 Census of Population.

Table 6.—Comparison of Employment and Pay Rolls in Identical Establishments in July and August 1939, by Principal Metropolitan Areas

Metropolitan area	Number of establish- ments, August 1939	Number on pay roll, August	Percent- age change from July	Amount of pay roll (1 week), August	Percent- age change from July
New York <sup>1</sup> Chicago <sup>3</sup> Philadelphia <sup>3</sup> Detroit Los Angeles <sup>4</sup> Cleveland	4, 376 2, 025 1, 442 2, 797 1, 508	587, 058 419, 329 199, 519 249, 488 148, 945 104, 352	+1.0 +1.0 +.5 -4.1 +.5 +2.5	\$15, 941, 580 11, 792, 834 5, 480, 070 8, 694, 514 4, 397, 719 2, 941, 432	+1. +1. +1. +3. +2. +8.
St. Louis Baltimore. Boston   Pittsburgh San Francisco  Buffalo Milwaukee	1, 143 2, 831 1, 049 1, 537	113, 543 106, 530 173, 986 166, 025 79, 919 62, 706 94, 727	-1.3 +.7 +2.2 +2.7 +1.5 8 +2.2	2, 795, 163 2, 679, 996 4, 319, 631 4, 697, 668 2, 438, 824 1, 711, 597 2, 674, 623	+1 +1 +11 +7 +5

Does not include Elizabeth, Jersey City, Newark, or Paterson, N. J., or Yonkers, N. Y.

Does not include Gary, Ind.
 Does not include Camden, N. J.
 Does not include Long Beach, Calif.
 Does not include Cambridge, Lynn, or Somerville, Mass.
 Does not include Oakland, Calif.

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#### UNEMPLOYMENT IN FOREIGN COUNTRIES, THIRD QUARTER OF 1939

MANY of the unemployment series given below showed a materially better situation with respect to numbers out of work in the late summer of 1939 as compared with the same period in 1938 and earlier months of this year. It was too early to obtain data showing the effect of the war upon the level of unemployment in most countries. However, registration in Great Britain increased in September to 1,330,928 after having fallen to a 10-year low in the preceding month. This reverse movement was accounted for in large part by the interruption of normal activities in the service trades, as for example in restaurants and motion-picture theaters.

The table following gives statistics of unemployment in foreign countries as officially reported, by years from 1933 to 1938, and by months beginning with August 1938 and including the latest month for which figures are available. Beyond comparisons of the figures in a single series for different periods it is not possible to use these unemanu-

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ployment statistics to measure volume of unemployment in a single country or to compare conditions in one country with those in another, owing to the fact that the coverage is not always complete. For example, only insured persons may be reported in some instances, while in other instances certain classes of workers, such as agricultural labor, may be entirely excluded.

#### Statement of Unemployment in Foreign Countries

	Austra	dia ·	Au	stria			E	lelg	ium	
	/T 1			npul-	U	nemp	loymer	ıt-ir	surance s	societies
Year and date (end of month)	Trade un unempl		ber emp	ber of un- employed in receipt		Wholly unemployed			Partially unemployed	
	Number	Percent		enefit	Nun	ber	Percei	nt	Number	Percent
1933	41,823	25. 1 20. 5 16. 5 12. 2 9. 3 8. 7	2 2 2 2	28, 844 87, 528 61, 768 59, 185 31, 313 74, 048	104,	855	17 13 11	.0	170, 023 166, 229 118, 754 91, 451 89, 281 163, 651	17. 2 17. 2 12. 8 10. 0 9. 8 16. 4
1938 August September October November December	43,092	9. 2	1 1	91, 511 73, 488 69, 617 72, 051 76, 621	124 135 150	750 ,010 ,847 ,892 ,145	13 14 15	2.5	149, 096 144, 076 154, 827 156, 470 232, 788	15.1 16.1 16.1
January February March April May June July	46, 611	9.8		08, 407 86, 000 62, 127 49, 102	166 152 144 150 144	, 299 , 851 , 735 , 932 , 021 , 188 , 651	16 18 14 14	7.4 3.7 5.1 1.3 1.8 1.2	218, 334 178, 051 148, 688 145, 062 157, 655 146, 928 156, 804	17. 8 14. 7 14. 3 15. 6 14. 5
	Canada	Dan	zig,		Denn				Estonia	Finland
Year and date (end of month)	of trade unionist	Num	nber ploy em- uner		le-union unem- yment funds— employed		nem- ds—	Number unem- ployed re- maining on		Number of unem- ployed
	unem- ployed	regist			ber	Per			re regis- ter	registered
1933 1934 1935 1936 1937 1938	18. 15. 13.	2 20 4 11 3 11 7 8	1, 408 0, 326 7, 983 3, 553 8, 009 3, 499	81 76 78 95	, 417 , 756 , 195 , 669 , 103 , 076		28.8 22.2 19.8 19.3 21.9 21.4		8, 210 2, 970 1, 779 1, 276 1, 158 1, 243	17, 139 10, 011 7, 163 4, 796 3, 763 3, 602
August September October November December	10. 12 13	4 3 7	1, 048 1, 200 1, 757 1, 985 4, 612	76 86 103	5, 659 5, 739 6, 188 8, 701 6, 533		16. 9 16. 8 18. 8 22. 7 31. 6		522 607 999 1,719 1,831	2, 747 3, 192 4, 041 5, 172 4, 294
January February March April May June July August September	16 15 13 11 11 11	.4 .7 .9 .7	2, 602 1, 812 1, 492 654 524 246 136	120 100 80 50 50 50	9, 225 8, 592 8, 316 9, 242 5, 180 3, 341 3, 296 6, 097 1, 211		29. 9 27. 1 22. 8 16. 9 11. 5 11. 1 11. 0 9. 5 12. 6		2, 252 1, 996 1, 769 1, 476 708 582 460 502 758	5, 006 4, 412 4, 331 3, 509 2, 985 2, 001 2, 072 2, 299

<sup>&</sup>lt;sup>1</sup> Revised serics—increased coverage.

<sup>&</sup>lt;sup>2</sup> Provisional figure.

#### Monthly Labor Review-November 1939

#### Statement of Unemployment in Foreign Countries-Continued

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Comment of the same	France	German	ny		Great Britain		Compulsory insurance				
Year and date (end of month)						Wholly unem- ployed			Tem	Temporary stop.	
	Number of unem- ployed in receipt of benefit	of unen	n-	Nur of per regist with ployr exchan	ered em- nent	Num	iber	Percent		er	Per- cent
1933 1934 1935 1935 1937 1938	276, 03; 345, 03; 426, 93; 432, 12; 350, 45; 375, 74;	2,718,3 1 42,151,0 0 1,592,6 3 912,3	009 039 030 012	2, 150 2, 036 1, 75	0, 616 9, 231 6, 422 4, 975 0, 681	2, 110 1, 801 1, 714 1, 497 1, 277 1, 423	, 913 , 844 , 587 , 928	16. 13. 13. 11. 9.	9 368,9 2 312,9 3 251,3 4 204,0	906 958 379 020	3.5 2.9 2.3 1.9 1.5 2.8
August September October November December	338, 383 338, 406 361, 724 367, 106 404, 736	9 155, 9 4 163, 9 6 152, 4	96 41 30	1, 798 1, 781 1, 828	9, 242 8, 618 1, 227 8, 103 1, 372	1, 333 1, 387 1, 516 1, 568 1, 591	,087 ,467 ,883	9. 10. 10. 10.	1 419, 6 2 314, 1 6 311, 8	895 161 562	3.3 3.1 2.1 2.1 2.0
January February March April May June July August September	415, 98: 414, 756 400, 07: 386, 158 375, 522 348, 98! 320, 367 302, 479	6 196, 7 5 134, 0 8 93, 9 69, 5 6 48, 8 7 38, 3	70 018 033 055 040 079	1, 896 1, 726 1, 644 1, 492 1, 349 1, 256	3, 424 1, 692	1,711 1,660 1,550 1,439 1,333 1,199 1,113 1,058 1,098	, 654 , 785 , 426 , 063 , 560 , 536 , 989	11. 10. 9. 9. 8. 7. 7.	2 297, 6 5 238, 6 7 245, 8 0 203, 4 1 200, 6 5 196, 8 1 216, 3	601 046 821 413 031 992 372	2.6 2.0 1.6 1.7 1.4 1.3 1.3
		Hungary				land Japan			an	Latv	
Year and date (end of month)	Employ- ment ex-	Trade-unemp		red sor		npul- y in- nce	om	Official estimates, unemployed		Number unem-	
	changes, applica- tions for work	Christian (Buda- pest)	D	octal emo- ratic	nur un plo	nber em- eyed stered	Nur	nber	Percent	ren	loyed naining n live egister
1933	52, 114	1, 085 996 967 800 945 1, 093	1	26, 716 22, 291 18, 315 15, 637 14, 279 16, 703	* 11	72, 255 03, 671 19, 498 99, 834 82, 425 88, 714	372 356 338	3, 710 2, 941 3, 103 3, 365 5, 443	5.6 5.0 4.6 4.3 3.7		8, 156 4, 975 4, 825 3, 855 3, 014 2, 164
1938 August September October November December	47, 413 45, 328 43, 631	1, 115 946 891 990 1, 041	1	15, 534 12, 889 12, 664 12, 953 16, 103	1	70, 552 70, 411 91, 280 93, 223 88, 380	230 226 221	0, 163 0, 203 0, 798 0, 030 0, 227	3.0 2.9 2.9 2.7 2.6		66 1,06 2,13 3,73
January February March April May June July August September	57, 418 58, 107 53, 795 50, 046 46, 876 44, 876	1, 087 1, 090 1, 146 884 807 842 827 726	1 1 1 1 1 1	20, 965 20, 929 20, 122 19, 899 18, 664 16, 924 15, 842 14, 064	10	05, 012 05, 457 06, 859 04, 945 96, 477 70, 470 70, 784 70, 961 77, 888			2.6		4, 33 4, 48 4, 05 2, 96 1, 25 72 63 44

New series from September 1937.
Includes the Saar.
Includes agricultural and domestic labor.
Registration area extended; incomplete returns, July to September 1938.

#### Statement of Unemployment in Foreign Countries-Continued

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1	Neth	erlands	New Ze			N	orway	7		Poland
Year and date (end of month)	insura	oloyment nce so- unem- oyed	Numb unem ploye register by emp	d red	(10 u	e unio mions) nploye	un-	Number unem- ployed remaining		Number unem- ployed registered with em-
(11/12)	Numbe	Percent	ment e	X-	Num	ber P	ercent	on l regis	IVE .	ployment
1933	160, 40 173, 67 168, 66 137, 70	0 32. 1 3 36. 3 8 36. 2 0 29. 2	46, 39, 38, 36,	235 234	16, 15, 14, 13, 16, 19, 19,	963 783 267 532	33, 4 30, 7 25, 3 18, 8 20, 0 22, 0	34 36 31 21	5, 591 5, 121 6, 103 2, 643 8, 520 8, 923	249, 660 342, 166 381, 935 367, 327 375, 088 347, 509
AugustSeptemberOctoberNovemberDecember	118, 38 119, 39 126, 61	3 23.8 7 26.6 3 25.3	1, 1, 1,	154 575 245 026 917	14, 15, 16, 18, 23,	683 940 519	16. 4 17. 7 18. 5 20. 7 26. 2	3 3	1, 068 6, 105 0, 085 3, 861 4, 873	211, 076 213, 781 234, 534 316, 474 455, 470
January	145, 14 124, 73 115, 29 103, 59 98, 24 97, 873	5   28.5 9   24.3 9   22.4 8   20.0 7   18.9 3   18.8 8   18.9	1,			045 355 981 050 108 996	27. 6 26. 9 24. 9 21. 1 15. 5 13. 1 11. 8	3 3 3 2 2 2 1 1	4, 122 4, 713 3, 194 0, 212 5, 037 0, 802 7, 643 8, 009 22, 672	542, 120 539, 512 496, 324 390, 308 296, 674 241, 464 211, 775
	Rumania	Swed	Sweden			Swi	tzerlan	nd		Yugo- slavia
Year and date (end of	Number unem-		le unionists employed		Unemployment funds				,	Number
month)	ployed remain- ing on live	Number	Percent	V	Wholly unem- ployed		P	Partially unem- ployed		of unem- ployed regis- tered
	register			Nu	mber	Perce	nt Ni	ımber	Percen	t
1933 1934 1935 1936 1937 1938	29, 063 16, 871 13, 852 13, 549 10, 851 7, 271	97, 316 80, 216 81, 385 71, 552 67, 351 74, 255	23, 7 18, 9 16, 1 13, 6 11, 6 11, 8			10. 9. 11. 13. 10. 8.	8 8 2 0		6. 1 5. 9 5. 3	15, 647 16, 752 19, 436 21, 650
August	5, 493	50, 461 51, 557 62, 137 75, 289 122, 357	8. 1 8. 2 9. 8 11. 9 19. 1		33, 600 34, 264 38, 400 46, 500 74, 689	6. 6. 8. 13.	3 8 2	23, 800 23, 502 22, 000 22, 700 26, 178	4. 4 4. 3 4. 1 4. 2 4. 8	10, 926 12, 103 14, 739
January	9, 349 7, 424 5, 716 4, 091 4, 017	101, 179 91, 456 85, 994 69, 376 50, 713 44, 214 39, 074 40, 106	15. 0 13. 3 12. 4 10. 1 7. 3 6. 4 5. 6 5. 8		76, 000 65, 100 56, 518 36, 200 28, 800 23, 947 <b>22,</b> 900	5.	4 4 1 4	23, 300 23, 100 21, 069 16, 900 15, 800 14, 717 13, 100	4. 3 4. 3 3. 9 3. 0 2. 8 2. 1	36, 699 33, 508 27, 965 21, 751 19, 788

 $<sup>^!\,\</sup>mathrm{New}$  series from 1933 through September 1937; revised in October 1937.

## **Building Operations**

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## SUMMARY OF BUILDING CONSTRUCTION IN PRINCIPAL CITIES, SEPTEMBER 1939 <sup>1</sup>

THE level of building activity in September, as measured by the value of permits issued, was 9.7 percent higher for all classes of building construction than in September 1938. New nonresidential permit valuations were 19.8 percent higher, largely because of increased permit activity in factory, public-utility, and commercial buildings. Permit valuations of new residential buildings increased 3.4 percent and additions, alterations, and repairs, 11.3 percent.

As compared with August, September permit valuations for new nonresidential buildings showed a gain of 30.0 percent, but decreases of 24.7 and 12.3 percent occurred in permit valuations of new residential buildings and additions, alterations, and repairs, respectively. The decline in building activity was caused primarily by a decrease in the value of contracts awarded for USHA projects. The value of these awards in August was \$28,583,000 while in September it amounted to only \$9,328,000. The permit valuation of all classes of building construction was 10.0 percent less than in September a year ago.

#### Comparison of September 1939 with August 1939 and September 1938

A summary of building construction in 2,049 identical cities in September 1939, August 1939, and September 1938 is given in table 1.

Table 1.—Summary of Building Construction for Which Permits Were Issued in 2,049

Identical Cities, September 1939

	Numb	er of build	lings	Permit valuation .			
Class of construction	September		ge change m—	September	Percentage change from—		
	1939	August 1939	Septem- ber 1938	1939	August 1939	Septem ber 1938	
All construction	66, 265	-7.7	+4.6	\$174, 009, 436	-10.0	+9.	
New residential. New nonresidential. Additions, alterations, and repairs	16, 043 12, 723 37, 499	-14.6 +.1 -7.0	+6.8 +7.2 +2.8	87, 267, 782 57, 953, 552 28, 788, 102	$ \begin{array}{r} -24.7 \\ +30.0 \\ -12.3 \end{array} $	+3. +19. +11.	

<sup>&</sup>lt;sup>1</sup> More detailed information by geographic divisions and individual cities is given in a separate pamphlet entitled "Building Construction, September 1939," copies of which will be furnished upon request.

A summary of permit valuations of housekeeping dwellings and the number of families provided for in new dwellings in 2,049 identical cities, having a population of 1,000 and over, is shown in table 2 for September 1939 as compared with August 1939 and September 1938.

Table 2.—Permit Valuation of Housekeeping Dwellings and Number of Families
Provided for in 2,049 Identical Cities, September 1939

	Permit value ing	ation of ho dwellings	usekeep-	Number of families provided for in new dwellings			
Type of dwelling	September	Percentag	ge change	September	Percentage change from—		
us it -	1939	August 1939	Septem- ber 1938	1939	August 1939	Septem- ber 1938	
All types	\$86, 549, 242	-24.5	+3.6	23, 443	-23.9	+0.1	
1-family 2-family 1 Multifamily 2	57, 442, 195 3, 114, 938 25, 992, 109	-13.8 -7.7 -41.7	+5.3 +13.2 8	14, 802 1, 142 7, 499	-12.6 -10.1 -40.5	+4.9 +12.7 -9.8	

Includes 1- and 2-family dwellings with stores.
Includes multifamily dwellings with stores.

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#### Construction During First 9 Months, 1938 and 1939

Cumulative totals for the first 9 months of 1939 compared with the same months of the preceding year are shown in table 3. The data are based on reports received from cities having a population of 1,000 and over.

Table 3.—Permit Valuation of Building Construction in Reporting Cities of 1,000 Population and Over, First 9 Months, 1938 and 1939

Class of construction	Permit valuation struction, first		Percentage change	
	1939	1938	change	
All construction	\$1, 579, 758, 728	\$1, 271, 215, 305	+24. 8	
New residential New nonresidential Additions, alterations, and repairs	858, 071, 289 458, 298, 804 263, 388, 633	641, 910, 456 389, 045, 733 240, 259, 116	+33.7 +17.8 +9.6	

Table 4 presents the permit valuation of housekeeping dwellings and number of family-dwelling units provided in cities with a population of 1,000 and over for the first 9 months of 1938 and 1939.

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Table 4.—Permit Valuation of Housekeeping Dwellings and Number of Family-Dwelling Units, First 9 Months of 1938 and of 1939, by Type of Dwelling

Type of dwelling		tion of house- wellings, first	Per- centage	Number of dwelling to 9 months of	Per-	
	1939	1938	change	1939	1938	change
All types	\$846, 896, 061	\$635, 861, 881	+33. 2	232, 572	174, 958	+32.
1-family 2-family <sup>1</sup> Multifamily <sup>2</sup>	536, 996, 199 26, 235, 039 283, 664, 823	416, 772, 398 25, 299, 926 193, 789, 557	+28.8 +3.7 +46.4	135, 876 10, 102 86, 594	105, 068 9, 543 60, 347	+29, +5, +43.

<sup>1</sup> Includes 1- and 2-family dwellings with stores.
<sup>2</sup> Includes multifamily dwellings with stores.

#### Analysis by Size of City, September 1939

Table 5 shows the value of permits issued for building construction in September 1939 compared with August 1939 and September 1938. by size of city and by class of construction.

Table 5.—Permit Valuation of Building Construction in 2,049 Identical Cities, by Size of City, September 1939

till die formungs	Number of cities	Total	constructi	New residential buildings			
Size of city		Permit valu-		ge change n—	Permit valu-	Percentage change from—	
		ation, Sep- tember 1939	August 1939	Septem- ber 1938		August 1939	September 1938
Total, all reporting cities	2, 049	\$174, 009, 436	-10.0	+9.7	\$87, 267, 782	-24.7	+3.
500,000 and over	14 79 96 158 422 379 449 452	58, 953, 406 36, 289, 555 14, 932, 893 15, 503, 680 29, 247, 254 10, 362, 219 5, 356, 639 3, 363, 790	-18.7 -9.1 -29.0 -11.0 +42.0 -12.7 -26.0 +21.7	-2.3 +25.2 -1.8 +8.8 +32.0 +19.6 -17.6 +31.8	32, 982, 187 17, 269, 180 7, 173, 509 6, 578, 932 11, 771, 484 5, 872, 271 3, 297, 816 2, 322, 403	-23.7 -28.4 -36.0 -36.9 -11.5 -27.5 -12.0 +22.2	-12. +31.; -2. +16. +10.; +6. +12. +70.

	New nonres	sidential h	ouildings	Additions			
uatic Septer	Permit val-	Percentage change from—		Permit val-	Percenta	Population (census of 1930)	
	September 1939	August 1939	Septem- ber 1938	September 1939	August 1939	Septem- ber 1938	
Total, all reporting cities	\$57, 953, 552	+30.0	+19.8	\$28, 788, 102	-12.3	+11.3	59, 890, 085
500,000 and over	16, 759, 030 11, 948, 796 4, 118, 256 5, 890, 527 14, 177, 500 2, 998, 791 1, 415, 069 645, 583	-2.9 +45.1 -29.1 +50.2 +291.4 +33.2 -49.9 -10.5	+20.4 +20.6 +4.1 -3.5 +61.5 +52.1 -52.6 -16.6	9, 212, 180 7, 071, 579 3, 641, 128 3, 034, 221 3, 298, 270 1, 491, 157 643, 754 395, 804	-23.3 -6.7 -9.2 -1.5 -10.2 -1.8 -2.9 +36.7	+6.7 +19.5 -7.4 +21.4 +22.2 +24.6 +10.7 -5.0	21, 449, 853 15, 017, 880 6, 397, 427 5, 579, 840 6, 444, 920 2, 674, 727 1, 610, 475 714, 963

The permit valuation of housekeeping dwellings in the 2,049 identical cities reporting for July and August 1939, together with the number of family-dwelling units provided in new dwellings, by size of city, is given in table 6.

TABLE 6.—Permit Valuation of Housekeeping Dwellings and Number of Families Provided for in 2,049 Identical Cities, by Size of City, August and September 1939

		valuation of h		Number of families provided for in—								
Size of city			Per-	All types		1-family dwellings		2-family dwellings <sup>1</sup>		Multifamily dwellings		
	Septem- ber 1939	August 1939	cent- age change	Sep- tem- ber 1939	Au- gust 1939	Sep- tem- ber 1939	Au- gust 1939	Sep- tem- ber 1939	Au- gust 1939	September 1939	Au- gust 1939	
Total, all reporting cities	\$86, 549, 242	\$114, 631, 630	-24.5	23, 443	30, 809	14, 802	16, 929	1, 142	1, 270	7, 499	12, 610	
500,000 and over	32, 681, 187	43, 171, 265	-24.3	8, 490	10, 479	3, 111	4, 087	297	309	5, 082	6, 083	
100,000 and under 500,00	17, 254, 180	23, 939, 427	-27.9	4, 813	6, 721	3, 283	3, 540	315	419	1, 215	2, 762	
50,000 and under 100,000 and under 50,000 and under 25,000 and under 25,000 and under 10,000 and under 3,000 and under 5,000 and under 5,000 and under 2,500	7, 135, 509 6, 542, 432 11, 599, 484 5, 733, 931 3, 281, 816 2, 320, 703	10, 244, 065 13, 207, 338 7, 380, 097 3, 712, 577	-36. 1 -12. 2 -22. 3 -11. 6	1, 792 3, 120 1, 571 882	3, 075 3, 653 2, 048 1, 011	1, 582 2, 716 1, 364 816	1, 744 2, 930 1, 566 916	141 115 74 46	99 151 72 40	69 289 133 20	1, 232 572 410 55	

Includes 1- and 2-family dwellings with stores.
Includes multifamily dwellings with stores.

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The information on building permits issued is based on reports received by the Bureau of Labor Statistics from 2,049 identical cities having a population of 1,000 and over.

The information is collected by the Bureau of Labor Statistics from local building officials, except in the States of Illinois, Massachusetts, New Jersey, and Pennsylvania, where the State departments of labor collect and forward the information to the Bureau. In New York and North Carolina the information from the smaller cities is collected by the Bureau of Labor Statistics from local building officials and the information from the larger cities is collected and forwarded to the Bureau by the State departments of labor. The permit valuations shown in this report are estimates made by prospective builders on applying for permits to build. No land costs are included. building projects within the corporate limits of the cities enumerated are included in the Bureau's tabulation. The data collected by the Bureau of Labor Statistics show, in addition to private and municipal construction, the value of buildings for which contracts were awarded by the Federal and State Governments in the cities included in the report. For September 1939 the value of these buildings amounted to \$17,859,000, for August 1939 to \$31,914,000, and for September 1938 to \$18,051,000.

#### Construction from Public Funds

The value of contracts awarded and force-account work started during September 1939, August 1939, and September 1938 on construction projects financed wholly or partially from various Federal funds is shown in table 7.

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Table 7.—Value of Contracts Awarded and Force-Account Work Started on Projects Financed from Federal Funds, September 1939 <sup>1</sup>

Federal agency	Contracts awarded and force-account work started-							
rederal agency	September 1939	August 1939 3	September 1938					
Total	\$107, 310, 652	\$141, 484, 283	\$215, 951, 9					
Public Works Administration: Federal Non-Federal:	453, 121	1, 213, 358	14, 243, 8					
N, I. R. A E. R. A. A P. W. A. A., 1938  Federal projects under The Works Program Regular Federal appropriations U. S. Housing Authority	70, 577, 569	512, 421 963, 234 28, 655, 456 16, 855, 595 67, 838, 584 25, 445, 635	822, 6 4, 932, 2 67, 068, 5 12, 349, 8 108, 500, 0 8, 034, 7					

1 Preliminary, subject to revision.

2 Revised

The value of public-building and highway construction awards financed wholly from appropriations from State funds, as reported by the various State governments for September 1939, August 1939, and September 1938 is shown in the following statement:

	Public build- ing	Highway con- struction
September 1939	\$551, 859	\$9, 494, 756
August 1939	2, 014, 975	7, 191, 527
September 1938	1, 871, 096	9, 717, 212

## Retail Prices

#### RETAIL FOOD PRICES IN SEPTEMBER 19391

RETAIL food costs for 51 cities combined increased 5.2 percent between August and September. Higher costs reported for all of the cities contributed to this advance. Price increases were shown for 43 of the 62 priced items, the greatest of which were 25 percent for sugar and 35 percent for lard.

The September index was 79 percent of the 1923-25 average. It was less than 1 percent higher than in the corresponding month of 1938 when the index stood at 78.7. Compared with preceding years, it was lower than in any other September since 1934.

#### Details by Commodity Groups

The cost of cereals and bakery products increased 1.0 percent between August and September. The price of flour advanced 10.6 percent and white bread remained unchanged. Other items in the group showed little price change.

Meat costs rose 6.1 percent. Price increases for all items in the group, except roasting chickens, ranged from 2.4 percent for sliced ham to 14.7 percent for pork chops.

The index for dairy products advanced 6.0 percent. The increase of 11.0 percent in the price of butter was largely seasonal. Milk averaged 4.2 percent higher as a result of increased prices in 11 cities.

A seasonal advance for eggs increased the cost 16.3 percent during the month and reached a point about 9 percent below the level of September 1938.

The cost of fresh fruits and vegetables showed little change and price movements were in the main seasonal. Prices rose slightly for all of the canned items but were below the level of September 1938. Navy beans increased 20.3 percent.

The price of coffee in September 1939 remained unchanged at the level reported for the 4 preceding months.

The price of lard rose 34.7 percent. Shortening sold in cartons increased 8.6 percent, while that sold in tin containers declined 1.0 percent to the lowest level for the year.

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<sup>&</sup>lt;sup>1</sup> More detailed information on food prices is given in the Retail Price pamphlet and will be furnished upon request.

Sugar prices advanced 24.8 percent to the highest point reached during the past 10 years.

Indexes of retail food costs for September and August 1939, together with indexes for August 1938, 1932, and 1929, are shown in table 1.

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Table 1.—Indexes of Retail Food Costs in 51 Large Cities Combined, by Commodity Groups, September and August 1939, and September 1938, 1932, and 1929

Commodity group	19	39	1938	1932	1929	
Commodity group	Sept. 191	Aug. 15	Sept. 13	<b>S</b> ept. 15	Sept. 1	
All foods	79.0	75. 1	78.7	66. 7	108	
Cereals and bakery products  Meats Dairy products Eggs Fruits and vegetables Fresh Canned Dried Beverages and chocolate Fats and oils		84. 4 91. 9 73. 6 64. 2 57. 9 56. 4 74. 0 56. 7 65. 3	88. 2 98. 2 77. 2 82. 2 54. 8 52. 6 76. 3 59. 5 66. 4	74. 3 75. 8 65. 4 62. 4 52. 8 51. 3 69. 2 54. 4 74. 6	98 124 103 108 107 108 96 107	

1 Preliminary.

The number of priced foods has been reduced from 84 to 62. An analysis of the Bureau's price data indicated a high degree of correlation in price movements for certain related items, notably among meats and cereals. Others of the dropped items are relatively unimportant in the food budget.

The quantity weights have been adjusted to maintain comparability in the indexes.

Prices of 43 of the 62 foods were higher in September than in August, 8 were lower, and 11 showed no change. Compared with September 1938, prices of 20 foods were higher, 38 were lower, and 4 showed no change.

The average increase of 5.2 percent in food prices for the 51 cities was fairly evenly distributed. The extremes were Omaha with an increase of 9.7 percent and Fall River, with an increase of 2.7 percent.

## ELECTRICITY AND GAS

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### Price Changes Between June and September 1939

RESIDENTIAL rates are secured quarterly from 51 cities for electricity and from 50 cities for gas. These cities are those included in the composite indexes for all foods. The rates are used in the computation of series of prices both for electricity and for gas. The blocks of consumption which have been selected as the bases of these prices are representative of average conditions throughout the country.

#### Electricity

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Prices of electricity are based upon the monthly use of 25 kilowatt-hours for lighting and small energy-consuming appliances; 100 kilowatt-hours for greater use of lighting and small appliances, and an electric refrigerator; and 250 kilowatt-hours for a still greater use of lighting, a larger number of small appliances, and both an electric refrigerator and an electric range.

Reductions in residential rates between June and September 1939 occurred in 7 of the 51 cities, and a reduction between March and June was reported in September for 1 city. Price decreases under the new rates to customers using 25, 100, and 250 kilowatt-hours per month are shown in table 4.

Table 4.—Percentage Decrease in Retail Prices of Specified Monthly Consumptions of Electricity, June 15 to Sept. 15, 1939, by Cities

		tage decr price of—			Percentage decrease in price of—				
City	25 kilo- watt- hours	100 kilo- watt- hours	250 kilo- watt- hours	City	25 kilo- watt- hours	att- urs hours	250 kilo- watt- hours		
Cleveland (Co. 2) Charleston, S. C Savannah	5. 9 3. 2 10. 8 4. 8	5. 4 6. 5 8. 2 8. 3	2.7 2.2 12.9 4.7	Salt Lake City	15. 6 5. 8 10. 0 17. 2	0 3.4 6.3 11.4	1. 8 7. 4 6. 8		

Lower prices for customers served by the Cleveland municipal plant were due to decreases in rates for the first two blocks of 50 kilowatt-hours each. Customers using 50 kilowatt-hours or less per month received the greatest benefits.

New rate schedules became effective in Charleston and New Orleans, both of which resulted in decreases for most of the customers using more than 15 kilowatt-hours. In Charleston the reduction amounted to 3.2 percent for the average monthly consumption of 25 kilowatt-hours. The reduction was cumulative up to the monthly use of 65 kilowatt-hours, where it amounted to 12.8 percent. For greater consumption the decrease was less. In New Orleans the decrease for the customers using 25 kilowatt-hours monthly amounted to 4.8 percent, with a still greater reduction for consumption up to 90 kilowatt hours.

An initial charge rate schedule was introduced in Savannah which was in effect a service charge. However, to customers using 25 kilowatt-hours monthly the new schedule brought a reduction of 10.8 percent. For greater monthly consumption the decreases varied, with the greatest relative reduction shown at 200 kilowatt-hours.

Salt Lake City reported a rate change which provided lower prices up to 60 kilowatt-hours per month, but were not effective for higher blocks of consumption.

All residential customers in San Francisco pay a fixed service charge. The new rate schedule was of the greatest benefit to the small consumer using up to and including 35 kilowatt-hours.

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A rate reduction in Seattle for the first 40 kilowatt-hours and a decrease in the number of kilowatt-hours in the second block provided a 10-percent reduction for customers using from 15 to 40 kilowatt-hours per month, and lesser decreases which varied for different amounts of electricity in excess of 40 kilowatt-hours. This change was equivalent to a 7.4-percent reduction for a monthly consumption of 25.0 kilowatt-hours.

In Mobile the objective rate plan which provides a lower rate for customers who have increased their consumption of current above that of some specified former date was discontinued as of May 1. The lower rate schedule was made available to all customers. The result was a considerable reduction in the cost of electricity to about 35 percent of the customers. This change was not reported to the Bureau in time for inclusion in June Retail Prices.

#### Gas

The prices of gas as computed by the Bureau are based upon 10.6 therms for the use of a range; 19.6 therms for range and manual type water heater; 30.6 therms for range and automatic-storage or instantaneous type water heater; and 40.6 therms for range, automatic water heater, and gas refrigerator.

Rate reductions between June and September were reported for four cities, two of which (Los Angeles and San Francisco) are served with natural gas, and two (St. Louis and Washington, D. C.) with mixed manufactured and natural gas. Price decreases under the new rates to customers using 10.6, 19.6, 30.6, and 40.6 therms per month are shown in table 5.

Table 5.—Percentage Decrease in Retail Prices of Specified Monthly Consumptions of Gas, June 15 to Sept. 15, 1939, by Cities

Cit-	Kind of	Heating value per cubic foot	Pero	entage of dec	rease in price	of-
City	gas 1	in British thermal units	10.6 therms	19.6 therms	30.6 therms	40.6 therms
Los Angeles San Francisco St. Louis Washington	N N X	1, 100 1, 150 800 604	4, 2 3, 0 , 4	6. 5 4. 3 4. 4	6. 8 5. 7 11. 0 1. 2	6. 6. 12.

<sup>1</sup> N indicates natural gas, and X, mixed manufactured and natural gas.

Price decreases were effective for residential customers in Los Angeles and San Francisco whose use of gas was in excess of that covered by the initial charge, namely, 300 cubic feet in Los Angeles and 200 cubic feet in San Francisco. In both cities the change lowered the price to the average residential customer, with a greater decrease in Los Angeles than in San Francisco. Under the new rate schedules customers in these two cities pay approximately the same price. New customers in Los Angeles using gas for central or space heating only were billed at the old rates for the first 10 months after which the lower rates became available.

In St. Louis rate reductions and changes in the number of therms included in the various blocks lowered the cost for all customers using more than the two therms included in the initial charge. Benefits gradually increased as the consumption increased, thereby providing the greatest reductions to commercial or industrial customers. Price decreases for the four domestic services ranged upward from 0.4 percent for 10.6 therms to 12.5 percent for 40.6 therms.

Washington, D. C., reported a reduction for customers using more than 3,000 cubic feet of gas (about 18 therms) per month. Decreases were made in the number of cubic feet included in the two blocks covering gas used in excess of the 800 cubic feet included in the initial charge. The greatest decrease, a little more than 3 percent, was for the monthly use of 8,000 cubic feet or more, which is above the usual residential consumption.

Changes in prices of natural gas reported for Pittsburgh since June 1938 have been due to slight variations from time to time in the heating value of the gas served in that city. The increase between prices based on the heating value of the gas in June 1938, and prices based on the average heating value of the gas since that date, ranged between 1 and 2 percent.

Houston reported an increase in the B. t. u. with a corresponding reduction in price in June, which was not shown in Retail Prices for June. This change lowered the cost to the small consumer by a little more than 2 percent.

The following is a clarification of the statement in Retail Prices for June which reported an increase in the price of gas in Cincinnati.

In November 1938 the city of Cincinnati entered into an agreement with the utility company which resulted in an increase in the heating value of the gas served in that city from an average of 865 B. t. u. to 930 B. t. u. for the 8 months from October to May, inclusive, and of 875 B. t. u. for the remaining months. This increase in heating value produced an average annual decrease of 6.6 percent in the cost of gas to the citizens of Cincinnati. The decrease averaged about 5 percent for the services for which the Bureau of Labor Statistics computes prices. The cost of gas for house heating is not included in the Bureau's reports. The Bureau computes its quarterly prices of gas as of March, June, September, and December, using the B. t. u. effective in those months. The prices in June and September

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on a heat-value basis with the present seasonal changes in B. t. u. of gas furnished will, therefore, be somewhat higher than the prices in March and December, although in all 4 months the prices are lower than those effective before the agreement of November 1938.

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#### RETAIL PRICES IN GOVERNMENT STORES IN MOSCOW <sup>1</sup>

THE First Five-year Plan (1928–32) of the Soviet Union was intended primarily for production of capital goods—factories, machines, railroads, ships, etc. The Second Five-Year Plan (1933–37) emphasized the production of consumers' goods, such as food, clothing, footwear, dwellings, etc. The goal set under this second plan was not fully reached, however, as a considerable part of the productive facilities of the Soviet Union was diverted for war preparations. The Third Five-Year Plan (1938–42) provided again for an increased production of consumers' goods, but again war preparation intervened. Also, the Soviet Government collected and stored up a considerable amount of consumers' goods, especially foodstuffs, against the event of war.

The threat of war and the withdrawal of consumers' goods explain, in part, the scarcity of these goods, and their inordinately high prices, which have resulted in a tendency toward lowering the standard of living in the Soviet Union.

The table following shows a considerable rise in the retail prices of goods in the Soviet stores in Moscow since 1936. On an average, prices on July 1, 1939, had increased about 13 percent over prices on the same date in 1936. Prices of meats and fish and their products, however, rose 23.9 percent.

The average monthly wage in the Soviet Union also rose from 238 rubles a month in 1936 to 287 rubles in 1939, that is, an increase of about 20 percent. The rise in prices accompanied by this increase in wages would indicate at first glance a rise in the standard of living. But the fact that some 129 kinds of foodstuffs were available in the Soviet stores on July 1, 1936, whereas only 84 kinds were available on July 1, 1939, would indicate a probable deterioration in the living standard.

There was also a decline in available clothing in the Moscow stores. Moreover there was a considerable increase (38 percent) in the prices of those articles of clothing available in 1936, which may still be purchased in Moscow. The current scarcity of the clothing supply is evidenced by the fact that second-hand suits for men in Moscow cost about 600 rubles, and second-hand rayon shirts about 60 rubles.

<sup>1</sup> Data are from report of Stuart E. Grummon, American charge d'affaires ad interim, Moscow.

Bread lines and the long lines for the purchase of various consumers' goods have been accompanied by an increase of underground private trade prohibited by the Government. It was disclosed for instance, that private traders were selling sugar for a price twice as high as they had paid in the Soviet stores and that they were demanding 6 rubles for a cake of laundry soap which they had bought for 1.50 rubles in the Government store.

In this connection it should be kept in mind that Moscow, as the capital of the Soviet Union, is far better supplied with foodstuffs and other consumers' goods than other cities, especially distant ones, in the Soviet Union. In many cases to increased scarcity should be added increased transportation cost, which owing to the insufficiency of facilities, is rather high in the Soviet Union.

Both prices and wages given are quoted in paper rubles, the actual value of which is rather obscure. The value of the former Imperial ruble amounted to 51.5 cents (United States currency) on the gold basis. The Soviet paper ruble (100 kopecs) is quoted by the Soviet State Bank at about 19 cents (\$1=5 rubles 30 kopeks). This, however, is considered to be merely a bookkeeping value.

The exportation and importation of paper rubles are prohibited by the Soviet Government. Therefore the Soviet paper ruble is not quoted on any regular money exchange abroad. However, on the irregular, so-called "black exchanges" (i. e., "in the street") in some boundary States-Finland, Estonia, and Poland-the Soviet paper ruble was quoted at from 4 to 8 cents in the summer of 1939.

Retail Prices of Principal Consumers' Goods in the Soviet Union, July 1, 1936, 1938. and 1939 1

Commodity	Unit 2	Retail prices (in rubles) on July 1—			Commodity	Unit 2	Retail prices (in rubles) on July 1—			
		1936	1938	1939			1936	1938	1939	
Bread, black, rye Bread, white, wheat	Kg	1. 70	0.85 1.70	0. 85 1. 70	Vermicelli	Kg	4, 00	5. 30 5. 00	5. 30 6. 10	
French loaf Chocolate (Mignon) Candy (bonbons), 1st	200 gm 100 gm	5, 45	1. 20 7. 50	1. 20 7. 50	Flour, 72 percent Flour, 30 percent	Kg Kg	2, 90 4, 60	5. 30 2. 90 4. 60	5. 30 2. 90 4. 60	
quality Chocolate candy, best Cocoa	250 gm	29, 60 15, 55	44. 40 14. 75	16. 80 44. 40 15. 55	Rice Salt Laundry soap	Kg Kg	3.00	6. 50 . 05 3. 10	(4) . 0! 3. 10	
TeaPepper, black, ground	400 gm 100 gm	40, 00 8, 00	36, 00 8, 00	48. 20 40. 00 8. 00	Glycerine soap Matches Kerosene	Box Liter.	.03	1. 55 . 02 . 47	1. 60 . 03	
Sunflower oil Olive oil Sugar, granulated	Kg	40.00	15. 92 25. 00 3. 80	15. 65 (4) 3. 80	Beef steak Beef roast Beef, for soup	Kg	9.60	12. 50 9. 60 7. 60	14. 00 10. 50 8, 00	
Sugar, lump	Kg Kg	4, 50	4. 10 4. 50 1. 30	4. 10 4. 50 1. 60	Beef chops Veal. Pork chops	Kg	10.60	11.50 10.00 10.60	12. 00 (4) 14. 40	
Rolled oats, grits  Buckwheat grits	Kg	. 90	1. 20	1, 20 . 57	Pork roast Ham, fresh Mutton chops	Kg	10. 60 10. 60	9.50 10.00	(4) (4)	
Shelled millet grits	Kg	2. 10	2. 10		Mutton	Kg	8.00			

As reported by the United States Embassy at Moscow, Soviet Union, July 10, 1939.

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Kilograms (1,000 grams) = 2.204 pounds; liter = 0.908 quart; meter = 39.37 inches. Foreign origin.

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# Retail Prices of Principal Consumers' Goods in the Soviet Union, July 1, 1936, 1938, and 1939—Continued

Commodity	Unit		il price ) on Ju		Commodity	Unit	Retairubles	il price ) on Ju	s (in ly 1—
		1936	1938	1939			1936	1938	1939
Chicken:					Honey		6.00	4. 50	10
First quality		10.00		11.00	Milk, fresh	Liter.	1.30	1.60	1,7
Second quality	Kg	7. 50	(4)	7. 50	Cream, fresh	Liter_	5. 50	6, 80	6.8
Geese:	Kg	10.00	11 00	11.00	Cream, sour	Kg	8.00	8,00	81
First quality Second quality	Kg	7. 60	(4)	(4)	Cheese, Swiss	Kg	22.00		24.3
Ouck			13.00	(4)	Cheese, Holland	Kg	22.00	22. 20	22.5
Turkey		13.00	13.00	(4)	Cheese, Holland	Kg	12.50 14.80		4 44 7
salmon, frozen	Kg		(4)	(4)	Butter:	178	14.00	(4)	19,
Perch, frozen		3.80	5. 40	(4)	First quality	Kg	19. 50	20.00	01
Sturgeon, chilled			(4)	(4)	Second quality	Kg	16.00	17. 50	21,
Pike perch, frozen	Kg	3. 40	(4)	(4)	Eggs	10	4.00		16.
Salmon, cured:	_				Suit of man's clothes:				4.1
First quality	Kg	18. 00		(4)	Soviet wool cloth	Piece.	650.00	(4)	900.0
Second quality	Kg	15. 00	(4)	(4)	Best Soviet wool	-			
sturgeon, cured:	Tr.	20 00	(4)	(4)	cloth		850.00		(4)
First quality Second quality	Kg	20. 00 15. 00	(4)	(4)	Common quality	Piece.	325.00	(4)	450.
Caviar, granulated	Kg	40.00	60, 00		Overcoat: Soviet wool cloth	Dices	700.00	111	
Caviar, compressed	Kg	32. 00		52. 90	Common quality		300, 00		(4)
Herring, salted	Kg	7.00	5, 50	6. 60	Underwear, cotton.	Pair	25, 00	1 /	460,
Iam, smoked	Kg	18.00	18.00	18.00	knit.	I dil	20.00	(4)	(4)
Bacon	Kg	15, 00	16.00		Underwear, woolen,	Pair	140.00	(4)	140
lausage, ordinary	Kg	10.00	10.00	10.00	knit.	2 0011	20.00	(-)	(4)
ausage, Vienna	Kg	10.00	12.00	12.00	Socks, rayon	Pair.	7.00	(4)	7.
ausage, Hamburger	Kg	16,00	16, 00	(4)	Socks, woolen	Pair.	16.00	(4)	(4
ausage, Cracow	Kg	14.00	14.00	(4)	Socks, cotton	Pair	3.00	(4)	3.
alami		28.00	30.00	30.00	Lady's stockings, cot-	Pair.	3. 20	4,00	4.
Salt pork, fat	Kg	22. 00	22.00	(4)	ton.				
Lard:	Va	20,00	(4)	(4)	Lady's stockings, rayon	Pair.			1
First quality	Kg	20.00 14.00	13. 00	(4)	Lady's stockings, silk Man's shoes:	Pair	40.00	(4)	(4)
Canned goods:	Kg	14.00	13.00	(.)	Leather	Pair.	100 00	100 0	
Pork and beans	500 gm	2.80	2. 11	2.80	Best quality	Pair.			
Tongue	400 gm	8, 00	7. 10	7. 10	Rubber soles	Pair.	60.00		75.
Green peas	500 gm	2.40	(4)	2.68	Lady's shoes:	A GIL	00.00	1.7	10.
Corn	500 gm	1.00	1.00	(4)	Best quality	Pair	250.00	(4)	74
Tomatoes	Kg	3. 50	(4)	(4)	Common quality	Pair.	60, 90		85
Sardines in oil	250 gm	3.00	3. 25	(4)	Man's rubber over-	Pair.	25.00	18, 70	
	500 gm	3.00	6. 20	(4)	shoes.				
sauce.	100	4 00	40	445	Lady's rubber over-	Pair	25.00	18.70	19
Anchovy ("kilki")	400 gm	4. 30	(4) (4)	(4)	shoes.	T1			
Anchovy ("shpro-	200 gm	4. 50	(,)	(4)	Shirt, cotton	Piece_	50.00		
ty").	Kg	. 30	. 40	. 60	Sheet, cotton, single bed.	Piece.	18.00	(4)	(4
Cabbage.		1.60	1. 50	2.00	Tablecloth, linen	Piece.	40.00	25.00	45
auerkraut	Kg.	. 40	. 57	(4)	Towel, linen	Piece.	7. 50		
ettuce	Kg		1.00	1.50	Necktie, rayon	Piece.	12.00		
Cucumbers	10	6.00	5.00	6. 50	Sweater:	1 11 00.	12.00	10.0	10
Cucumbers, pickled	Kg	2.00	(4)	(4)	Woolen, knit	Piece	150.00	(4)	10
Onions	Kg	1.50	(4)	1.00	Cotton, knit	Piece	29.00		10
Freen onions	Kg	1, 60	. 60	1.50	Hat, felt	Piece.		40.0	
Aushrooms, dried	Kg	35, 00	(4)	(4)	Cap, woolen	Piece.	22.00	25. 7	0 35
Beets	Kg	. 26	(4)	. 60	Fur cap, Astrakhan	Piece.	200.00	250.0	0 (
Carrots	Kg	. 40	. 80	. 80	Cloth:	22			
Mushrooms, pickled	Kg	2.50	(4) (4)	(4)	Woolen, light		110.00		
pples	Kg	6. 00 8. 00	(4)	(4)	Woolen, heavy	Meter	200.00		0 250
emons	Kg	23. 00			Flannel, cotton	Meter			0
Frapes	Kg	8, 00	(4)	(4)	Calico	Meter			
Hazelnuts (filberts)	Kg	9. 00	(4)	(4)	Mixed wool and cotton	Meter			7
Walnuts	Kg	10. 60	9, 00		cloth.	refel	00.00	(,)	10
lmonds	Kg	15. 00	15.00		Light woolen cloth (for	Meter	120.00	(4)	180
Raisins	Kg	10.00	8.00	(4)	dresses).	2.20001	20.00	11	1
Dried apples	Kg	6.60	8.00		Crepe de Chine	Meter	45, 00	75.0	0 9
Oried prunes	Kg	14.00	12.00	17. 50	Cotton shirting	Meter	6. 50		
Oried mixed fruits	Kg	8. 50	7. 50	(4)				1	

<sup>4</sup> Not available.

# Wholesale Prices

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#### WHOLESALE PRICES IN SEPTEMBER 1939 1

FOLLOWING the outbreak of war in Europe, commodity prices at wholesale rose to the highest level reached since the spring of 1938. The Bureau of Labor Statistics' index rose from 75.0 for August to 79.1 for September, a gain of 5.5 percent. Compared with September of last year, the all-commodity index rose 1 percent.

Each of the 10 major group classifications advanced during the The increases ranged from 0.3 percent for fuel and lighting

materials to about 12 percent for farm products and foods.

After dropping to the lowest point of the past 5 years in August, prices of raw materials reacted and rose over 9 percent in September to the highest level reached in the past year and a half. Semimanufactured commodity prices advanced nearly 10 percent and finished products increased 3.5 percent. The index for "All commodities other than farm products," reflecting the movement in prices of nonagricultural commodities, rose 4.4 percent and the index for "All commodities other than farm products and foods," marking the trend in prices of industrial commodities, gained 2.5 percent.

Sharp increases in grains, livestock, poultry, eggs, apples, lemons, oranges, hay, hops, milk, flaxseed, beans, onions, potatoes, and wool caused the farm products group index to advance 12.6 percent. Grain and hog prices rose from 20 to 30 percent; cattle, from 10 to 15 percent; eggs, over 16 percent; apples, from 8 to 36 percent; hops, nearly 28 percent; milk at Chicago and New York, about 10 percent; beans, more than 50 percent; potatoes, from 10 to 20 percent; and wool, from 20 to nearly 40 percent. The advances brought the farm products group index to 68.7 percent of the 1926 average, the

highest level reached since July a year ago.

Average wholesale prices of foods rose 11.8 percent as a result of advances of about 19 percent for "Other foods"; nearly 10 percent for dairy products, cereal products, and meats; and 7 percent for fruits and vegetables. Butter and cheese prices rose 13 percent; flour increased over 20 percent; most dried fruits, from 30 to 50 percent; canned fruits, about 5 percent; fresh pork, 16 percent; beef,

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<sup>&</sup>lt;sup>1</sup> More detailed information on wholesale prices is given in the Wholesale Price pamphlet and will be furnished upon request.

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about 11 percent; cocoa beans and copra, 32 percent; lard, 38 percent; oleo oil, 54 percent; pepper, 43 percent; sugar, 28 to 30 percent; tallow, 61 percent; and vegetable oils, 18 to 40 percent. The foods group index, 75.1, was 0.8 percent above the corresponding month of last year.

An increase of 26 percent in hides and skins, together with an advance of 9 percent for leather and 1 percent for shoes, caused the hides and leather products group index to rise 6.3 percent during September. Average wholesale prices of other leather manufactures

such as luggage, belting, and gloves were steady.

Pronounced advances in prices of cotton goods, hosiery and underwear, silk and rayon, woolen and worsted goods, and "Other textile products" such as burlap, hemp, thread, and cordage brought the textile products group index up 5.8 percent. This is the highest point reached in the past 2 years, the index being 9 percent higher than it was for September 1938.

Advancing prices for gasoline, kerosene, Kansas-Oklahoma crude petroleum, and coal were responsible for an advance of 0.3 percent in

the fuel and lighting materials group index.

Largely as a result of sharp advances in prices of nonferrous metals, scrap steel, and pig iron, the metals and metal products group index rose 1.7 percent. Average wholesale prices of agricultural implements

and plumbing and heating fixtures were steady.

The building materials index rose 1.5 percent during September, principally because of higher prices for concrete building blocks, paint materials, lumber, prepared roofing, lead pipe, copper and zinc sheets, and copper wire. No changes were reported in prices of brick, cement, and structural steel.

Higher prices for fats and oils, together with sharp advances in prices of alcohol, camphor, strychnine, and tankage, contributed largely to an increase of 3.6 percent in the chemicals and drugs group index.

The housefurnishing goods group index rose 1.2 percent largely because of higher prices for bedding, floor covering, and office chairs.

During September, prices of crude rubber and cattle feed advanced over 36 percent, paper and pulp increased 2.3 percent, and cylinder oil and paraffin wax prices rose sharply.

Index numbers for the groups and subgroups of commodities for August and September 1939 and September 1938 are shown in table 1.

Table 1.—Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities
[1926=100]

Group and subgroup	Sep- tem- ber 1939	Au- gust 1939	Sep- tem- ber 1938	Group and subgroup	Sep- tem- ber 1939	Au- gust 1939	Sep- tem- ber 1938
All commodities	79.1	75. 0	78. 3	Metals—Continued.  Motor vehicles 2	92.1	92.5	96. 2
Farm products	69. 7	61.0	68. 1	Nonferrous metals		74.6	73. 3
Grains	65. 1	51.5	53.0	Plumbing and heating		79.3	78.
Livestock and poultry	76.3	66.0	81.0				
Other farm products	64. 6	60. 1	63. 2	Building materials	91.0	89. 6 90. 5	89. 1 90. 1
Foods	75. 1	67. 2	74.5	Cement 3	91.3	91.3	90.
Dairy products	74.5	67. 9	71.1	Lumber	93.7	91.8	90.
Cereal products	78.8	71.9	76.1	Paint and paint materials		82. 1	80.
Fruits and vegetables	62.8	58. 5	55. 5	Plumbing and heating		79.3	78.
Meats	81.0	73. 7	87.3	Structural steel		107.3	107.
Other foods	71.7	60.3	69. 5	Other building materials	90.3	89.5	91.
Bides and leather products	98.5	92.7	92.0	Chemicals and drugz		74.6	77.
Shoes		100.8	100. 8 75. 7	Chemicals	81. 2	77.5	81.
		84.0	82.4	cals	72.8	71.7	74.
Leather Other leather products	97.1	97. 1	96.9	Fertilizer materials		67. 2	67.
Other leather produces	01.1	91.1	30. 9	Mixed fertilizers		72.9	73.
Textile products	71.7	67.8	65. 8				
Clothing	81.7	81.5	81.6	Housefurnishing goods	86.6	85.0	86.
Cotton goods	70.4	65. 5	64. 1	Furnishings		90.0	90.
Hosiery and underwear		61.5	59.9	Furniture	81.3	81.1	82.
Silk and rayon	43.4	39.5	29.5				
Woolen and worsted goods		75.5	76.3	Miscellaneous		73.3	72.
Other textile products	1	63.7	65.0	Automobile tires and tubes.  Cattle feed		60.5	57. 67.
Fuel and lighting materials	72.8	72.6	76. 6	Paper and pulp		80.0	81.
Anthracite	72.5	72.1	79.1	Rubber, crude	47.7	34.9	33.
Bituminous coal		96.0	98.4	Other miscellaneous	. 82. 8	81. 3	81.
Coke		104. 2	104. 2	Other miscenaneous	. 04. 0	01.0	01.
Electricity	(1)	75.8	81.8	Raw materials	72.6	66.5	72.
Gas		86.7	88.7	Semimanufactured articles	81.8	74.5	74.
Petroleum	53.3	51.7	56.4	Finished products	81.9	79. 1	81.
Metals and metal products	94.8	93. 2	95. 5	All commodities other than	0		1
Agricultural implements			95.5	farm products	81.3	77.9	80.
Farm machinery			96.9	All commodities other than	1	1	-
Iron and steel			97.3	farm products and foods	82.1	80.1	81.

1 Data not available.

Preliminary revision.
 Preliminary revision; see pp. 11 and 12 of March 1939 Wholesale Prices.

Important percentage increases in subgroup indexes from August to September are shown in table 2.

Table 2.—Important Percentage Increases in Subgroup Indexes from August to September 1939

Commodity group	Percent- age in- crease	Commodity group	Percent age in- crease
Rubber, crude Cattle feed Grains Hides and skins Other foods Livestock and poultry Nonferrous metals Woolen and worsted goods Meats Silk and rayon Dairy products Cereal products Cereal products Leather Other farm products Cotton goods Fruits and vegetables Chemicals	36. 5 26. 4 26. 2 18. 9 15. 6 13. 5 11. 3 9. 9 9. 9 9. 7 9. 6 9. 6 9. 5 7. 5	Paint and paint materials Petroleum products Fertilizer materials Paper and pulp Lumber. Hosiery and underwear Furnishings. Other miscellaneous Drugs and pharmaceuticals Shoes. Other building materials Bituminous coal Anthracite Brick and tile Iron and steel Clothing Furniture	333222222111111111111111111111111111111

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# Index Numbers by Commodity Groups, 1926 to September 1939

Index numbers of wholesale prices by commodity groups for selected years from 1926 to 1938, inclusive, and by months from September 1938 to September 1939, inclusive, are shown in table 3.

Table 3.—Index Numbers of Wholesale Prices, by Groups of Commodities
[1926=100]

Year and month	Farm prod- ucts	Foods	Hides and leather prod- ucts	Tex- tile prod- ucts	Fuel and light- ing	Metals and metal prod- ucts	Build- ing mate- rials	Chemicals and drugs	House- fur- nish- ing goods	Mis- cel- lane- ous	All com- modi- ties
By years:  1926 1929 1932 1933 1936 1937 1938 By months:	100, 0	100. 0	100, 0	100. 0	100. 0	100. 0	100. 0	100, 0	100. 0	100. 0	100.
	104, 9	99. 9	109, 1	90. 4	83. 0	100. 5	95. 4	94, 2	94. 3	82. 6	95.
	48, 2	61. 0	72, 9	54. 9	70. 3	80. 2	71. 4	73, 5	75. 1	64. 4	64.
	51, 4	60. 5	80, 9	64. 8	66. 3	79. 8	77. 0	72, 6	75. 8	62. 5	65.
	80, 9	82. 1	95, 4	71. 5	76. 2	87. 0	86. 7	80, 4	81. 7	70. 5	80.
	86, 4	85. 5	104, 6	76. 3	77. 6	95. 7	95. 2	83, 9	89. 7	77. 8	86.
	63, 5	73. 6	92, 8	66. 7	76. 5	95. 7	90. 3	77, 6	86. 8	73. 3	78.
September October November December 1939:	68. 1	74. 5	92. 0	65. 8	76. 6	95. 5	89. 5	77. 3	86. 2	72. 4	78.
	66. 8	73. 5	93. 4	66. 2	75. 4	95. 3	89. 8	77. 1	85. 7	72. 6	77.
	67. 8	74. 1	94. 6	66. 2	73. 7	94. 9	89. 2	76. 6	85. 8	73. 0	77.
	67. 6	73. 1	93. 1	65. 8	73. 2	94. 6	89. 4	76. 7	86. 0	73. 1	77.
January	67. 2	71. 5	93. 1	65. 9	72, 8	94. 4	89. 5	76. 7	85. 4	73. 2	76
February	67. 2	71. 5	91. 9	66. 1	73, 0	94. 3	89. 6	76. 3	85. 2	73. 5	76
March	65. 8	70. 2	91. 8	66. 6	73, 1	94. 3	89. 8	76. 5	85. 2	74. 1	76
April	63. 7	68. 6	90. 9	66. 9	73, 4	94. 0	89. 6	76. 0	85. 4	74. 4	76
May	63. 7	68. 2	91. 6	67. 5	73, 9	93. 5	89. 5	75. 9	85. 5	74. 2	76
June	62. 4	67. 6	92.3	67. 3	73. 0	93. 2	89. 5	75. 7	85. 6	73. 8	75
	62. 6	67. 5	92.5	67. 6	72. 8	93. 2	89. 7	75. 0	85. 6	73. 4	75
	61. 0	67. 2	92.7	67. 8	72. 6	93. 2	89. 6	74. 6	85. 6	73. 3	75
	68. 7	75. 1	98.5	71. 7	72. 8	94. 8	90. 9	77. 3	86. 6	76. 6	79

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The price trend for specified years and months since 1926 is shown in table 4 for the following groups of commodities: Raw materials, semi-manufactured articles, finished products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Finished products" was given in the December and Year 1938 issue of the Wholesale Price pamphlet.

TABLE 4.—Index Numbers of Wholesale Prices, by Special Groups of Commodities

[1926 = 100]

Year and month	Raw mate- rials	Semi- man- ufac- tured arti- cles	Fin- ished prod- ucts	All com- mod- ities other than farm prod- ucts	All com- mod- ities other than farm prod- ucts and foods	Year and month	Raw mate- rials	Semi- man- ufac- tured arti- cles	Fin- ished prod- ucts	All com- mod- ities other than farm prod- ucts	All com- mod- ities other than farm prod- ucts and foods
By years: 1926 1929 1932 1933 1936 1937 1938 By months: 1938: September October November December	100. 0 97. 5 55. 1 56. 5 79. 9 84. 8 72. 0 72. 0 70. 9	100. 0 93. 9 59. 3 65. 4 75. 9 85. 3 75. 4 74. 7 75. 2	100. 0 94. 5 70. 3 70. 5 82. 0 87. 2 82. 2 81. 8 81. 1 80. 5 80. 2	100, 0 93, 3 68, 3 69, 0 80, 7 86, 2 80, 6 80, 4 79, 9 79, 5 79, 0	100. 0 91. 6 70. 2 71. 2 79. 6 85. 3 81. 7 81. 3 81. 1 80. 6 80. 3	By months—Continued. 1939: January	70. 9 70. 9 70. 1 68. 5 68. 9 67. 7 67. 8 66. 5 72. 6	74. 9 74. 4 74. 6 74. 4 74. 3 74. 1 74. 4 74. 5 81. 8	80. 0 80. 2 80. 2 80. 1 79. 9 79. 6 79. 2 79. 1 81. 9	78. 9 78. 9 79. 0 78. 8 78. 8 78. 4 78. 1 77. 9 81. 3	80. 2 80. 2 80. 4 80. 5 80. 6 80. 2 80. 2 80. 1 82. 1

## Weekly Fluctuations

Weekly fluctuations in the major commodity group classifications during August and September are shown by the index numbers in table 5.

Table 5.—Weekly Index Numbers of Wholesale Prices by Commodity Groups, August and September 1939

[1926 = 100]

Commodity group	Sept.	Sept.	Sept.	Sept.	Sept.	Aug.	Aug.	Aug.	Aug.
	30,	23,	16,	9,	2,	26,	19,	12,	5,
	1939	1939	1939	1939	1939	1939	1939	1939	1939
All commodities	79. 5	79. 5	79.3	78. 4	75. 3	74.8	74. 6	74.8	75. 1
Farm products Foods Hides and leather products Textile products Fuel and lighting materials	69. 3	69. 5	69. 7	68. 1	62. 7	61. 1	60, 4	61, 4	62. 5
	74. 4	75. 1	75. 5	74. 5	68. 5	66. 7	66, 2	66, 7	67. 2
	104. 1	100. 4	98. 3	96. 0	92. 7	92. 6	92, 8	93, 5	93. 7
	73. 4	72. 3	71. 4	68. 4	67. 2	67. 4	67, 4	67, 2	67. 4
	74. 4	74. 2	74. 1	74. 0	73. 2	73. 2	73, 6	73, 5	73. 4
Metals and metal products Building materials Chemicals and drugs Housefurnishing goods Miscellaneous	95. 2	95. 3	94. 9	94. 6	93. 5	93. 5	93. 5	93. 5	93. 4
	91. 2	91. 0	90. 7	90. 1	89. 7	89. 7	89. 5	90. 1	90. 1
	78. 5	77. 9	77. 1	75. 9	74. 4	74. 2	74. 2	74. 3	74. 5
	89. 1	88. 8	87. 1	87. 0	87. 0	87. 0	87. 0	87. 0	87. 0
	76. 7	76. 6	76. 1	76. 1	73. 2	73. 1	73. 0	73. 0	73. 0
Raw materials Semimanufactured articles Finished products All commodities other than farm	82. 4	73. 0 83. 3 82. 5	73, 0 82, 0 82, 3	71. 8 79. 7 81. 9	67. 1 74. 6 79. 7	66. 2 74. 4 79. 3	66. 2 74. 3 79. 0	66. 8 74. 4 79. 1	67. 6 74. 5 79. 2
All commodities other than farm products and foods.	81. 8 83. 3	81.7	81. 4 82. 4	80.7	78. 1 80. 4	77. 8 80. 4	77. 7 80. 4	77. 8 80. 5	77. 9 80. 5

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78.3 77.6 77.5 77.0 76.9 76.9 76.2 76.2 75.6 75.4 75.0 79.1

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#### OCTOBER 1939

#### Coal-Mining Industry

The coal-mining industry—an international study in planning. By J. H. Jones, G. Cartwright, P. H. Guénalt. London, Sir Isaac Pitman & Sons, Ltd., 1939, 394 pp., charts.

394 pp., charts.
Survey of the organization of capital in the coal industry of different countries in an effort to offset depression.

Fifty-seventh coal report of Illinois, 1938. Springfield, Department of Mines and Minerals, 1939. 280 pp.

Information is given on seam conditions, mechanization of mines, working time, employment, accidents, and other subjects of labor interest.

Statistische übersicht über die kohlenwirtschaft im jahre 1938. Berlin, Reichskohlenrat, 1939. 157 pp., charts.

Contains a statistical review of the coal industry throughout the world during 1938, including amount mined, prices, and international trade; the number of workers engaged in German coal mines, their productivity, wages, and hours of labor; and the degree of mechanization in German mines.

#### Cooperative Movement

Cooperative societies throughout the world. (In International Labor Review, Geneva, August 1939, pp. 254-271; September 1939, pp. 375-419; also reprinted.) Statistics, with explanatory text, of number, membership, amount of business, etc., of various types of societies, covering for the most part the year 1937.

Cooperative purchasing in Washington. By E. F. Dummeier. Pullman, State College of Washington, Agricultural Experiment Station, 1939. 28 pp. (Bulletin No. 371.)

Results of a survey of cooperative purchasing by both farmer and nonfarmer groups throughout the State of Washington. The data relate, for the most part, to the year 1936.

Farmers' business organizations in Canada, 1936-37. By A. E. Richards. Ottawa, [Department of Agriculture, Agricultural Economics Branch?], 1938. 3 pp. Includes information on purchasing as well as marketing associations.

The consumers' cooperative as a distributive agency. By Orin E. Burley. New York, McGraw-Hill Book Co., Inc., 1939. 338 pp.

A guide for members of cooperatives. Washington, U. S. Rural Electrification Administration, 1939. 48 pp., illus.

Questions and answers on cooperation, with special reference to cooperatives of electric power, created under the Rural Electrification Act.

#### Employment and Unemployment

Census of manufactures: Wage earners, by months, 1937. Washington, U. S. Bureau of the Census, 1939. 15 pp.

The data show that the average number of wage earners in the manufacturing industries in 1937 was 8,569,231, which was 188,695 above the average for 1929.

Industrial change and employment opportunity—a selected bibliography. Washington, U. S. Works Progress Administration, 1939. xv, 254 pp. (National Research Project Report No. G-5.)

Survey of Employment Service information: Analysis of characteristics of more than 7,250,000 applicants in active file inventory, April 1938, and of placements during period from January through September 1938. Washington, U. S. Employment Service, 1939. 153 pp.

Wasted manpower: The challenge of unemployment. By Corrington Gill. New York, W. W. Norton & Co., Inc., 1939. 312 pp.

Describes the seriousness of the unemployment problem, the complexities of its causes, and the numerous methods of dealing with it. According to the author. getting the idle manpower of the country back to work depends upon the upsurge of real investment. He holds that a public investment program should be energetically pushed and at the same time every opportunity for private investment be encouraged.

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d.) siness, Arbejdsløshedsproblemet i Danmark, 1930-1938. Copenhagen, Socialministeriet, 1939. 377 pp., charts.

Textual and statistical information on the unemployment problem in Denmark, and measures for relief, during 1930-1938.

#### Health and Industrial Hygiene

The building of a nation's health. By Sir George Newman, M. D. London, Macmillan & Co., Ltd., 1939. 479 pp.

Reviews the growth of the public-health movement in England, including school medical service, maternal and child care, industrial health activities, nutrition of the people, health insurance, and medical research.

Medicine at the crossroads. By Bertram M. Bernheim, M. D. Rahway, N. J., Quinn & Boden Co., 1939. 256 pp.

The case for and against socialized medicine is described by presenting the minus and plus factors in private practice.

Medical jurisprudence and toxicology. By William D. McNally. Philadelphia,

W. B. Saunders Co., 1939. 386 pp., illus.
Concise presentation of modern knowledge of medical jurisprudence and toxicology, with a comprehensive subject index. Some of the industrial poisons and their effects are stressed, and there is a chapter on silicosis and asbestosis.

Medicolegal phases of occupational diseases—an outline of theory and practice. By C. O. Sappington, M. D. Chicago, Industrial Health Book Co., 1939. 405 pp. The volume is divided into four sections dealing, in the first, with various causes of occupational diseases, control of occupational exposure, and cost of occupational diseases; and in the second, third, and last sections with insurance, medical, and legal problems, respectively. Appendixes contain abstracts of State laws dealing with the definition of occupational injury and disease, a suggested schedule of compensable occupational diseases, and a digest of workmen's compensation laws by States.

Occupational-disease legislation of 1939. Washington, U. S. Bureau of Labor Statistics, 1939. 4 pp. (Serial No. R. 965, reprint from July 1939 Monthly Labor Review.)

Miners' welfare, 1938: Seventeenth annual report of Miners' Welfare Committee, Great Britain. London, 1939. 124 pp., illus.

Covers the health and recreational facilities provided by and the financial condition of the Miners' Welfare Fund.

Silicosis and lead poisoning among pottery workers. Washington, U. S. Public Health Service, 1939. 178 pp., charts, illus. (Public health bulletin No. 244.) Nine pottery factories in West Virginia were covered in this investigation, which included an engineering survey of the manufacturing processes and the lead and dust hazards, and a medical study. The medical report gives the results of the physical examinations of the workers and the findings regarding the incidence of lead poisoning and silicosis. The volume contains an annotated bibliography and a definition of occupations.

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- Housing of dependent aged. Washington, U. S. Bureau of Labor Statistics, 1939. 7 pp. (Serial No. R. 977, reprint from August 1939 Monthly Labor Review.)
- Longshoremen and their homes. By Elizabeth Ogg. New York, Greenwich House, 1939. 64 pp., charts, illus.
- Results of a survey conducted under the auspices of Greenwich House. Income, living, and social conditions of longshoremen are covered.
- Three-thirds ill housed. By Fred Swan. (In The Technocrat, Los Angeles, July-August 1939, pp. 3-7; chart, illus.)
- Indicates that sellers of materials and labor organizations block the American people from securing satisfactory housing, and predicts that prefabrication will solve the housing problem when artificial price curbs are removed.
- Land, materials, and labor costs. Washington, U. S. National Resources Committee, 1939. 101 pp., charts. (Housing monograph series No. 3.)
  Technical monograph on housing, including data on labor and material costs.
- Planning neighborhoods for small houses. Washington, Federal Housing Administration, 1939. 33 pp., diagrams. (Technical bulletin No. 5, revised.)
- Deals with the importance of planned neighborhoods and general principles of planning.
- Planning profitable neighborhoods. Washington, Federal Housing Administration, 1938. 35 pp., plans, illus. (Technical bulletin No. 7.)
- Outlines the fundamental principles and standards in planning that make communities more desirable places in which to live.
- Tax exemption of public housing. Washington, U. S. Housing Authority, [1939?] 8 pp.
- A calculation of the cost of tax exemption on a low-cost housing project to the taxpayers in an imaginary typical large city.
- The book of the modern house—a panoramic survey of contemporary domestic design. Edited by Patrick Abercrombie. London, Hodder & Stoughton, 1939.
  - x, 378 pp., plans, illus.

    Contains information on ready-built houses and housing for working people.
- Memoria de hacienda [Colombia], 1939. Bogotá, Ministerio de Hacienda y Credito Publico, 1939. 222 pp. This report of the Ministry of Finance and Public Credit of Colombia for 1939
- This report of the Ministry of Finance and Public Credit of Colombia for 1939 has a section on the campaign for the improvement of rural housing conditions in that country.

#### Income and Wealth

- National income and its distribution, 1919-1938: A comparison of long-term national income estimates. By Robert F. Martin. (In Conference Board Economic Record, National Industrial Conference Board, Inc., New York, September 8, 1939, pp. 81-92.)
- General income figures are given by States for the years 1919 to 1938, with a more detailed analysis for 1938. The general estimates by the National Industrial Conference Board, extending back to 1850, are compared to the estimates made by Willford I. King, National Bureau of Economic Research, Brookings Institution, and U. S. Bureau of Foreign and Domestic Commerce.
- State income payments, 1929-37. By Robert R. Nathan and John L. Martin. Washington, U. S. Bureau of Foreign and Domestic Commerce, 1939. 22 pp. The tables give estimated total income payments by States with index numbers, per capita payments, and payments itemized under (1) salaries and wages, (2) other labor income, (3) entrepreneurial withdrawals, and (4) dividends, interest,
- net rents, and royalties.

  Income in counties of Alabama, 1929 and 1935. By W. M. Adamson. University, Ala., University of Alabama, Bureau of Business Research, 1939. 122 pp., charts. (Multilithed series No. 1.)
- The author describes the volume as a pioneer attempt at local income analysis in Alabama. Authentic information about local income is increasingly significant, it is held, in facilitating solution of the problems of governmental aid, social plan-

ning, economic control, and market analysis. The figures include farm, nonfarm, family, and per capita income, and combined estimates of wages and salaries by major industrial sources.

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New estimates of the national wealth and of its State distribution, 1922-1937. By Roland P. Falkner. (In Conference Board Economic Record, National Industrial Conference Board, Inc., New York, October 5, 1939, pp. 117-127; charts.)

The statistical pattern of installment debt. By R. A. Young and Blanche Bernstein New York, National Bureau of Economic Research, October 15, 1939. 22 pp., charts. (Bulletin 76-7.)

The study covers the year 1935-36. Estimates are made of the families in different income groups having a net change in installment debt. The study also indicates how installment-buying habits vary in different types of communities and different regions.

#### Industrial Accidents and Workmen's Compensation

Accidents to window cleaners [in New York State] in 1938, analyzed by cause. (In Industrial Bulletin, New York Department of Labor, Albany, July-September 1939, p. 330.)

Cumulative loose-leaf index to proceedings of International Association of Industrial Accident Boards and Commissions. Prepared by J. William O'Connell, Jr. Washington, U. S. Department of Labor, Division of Labor Standards, 1939.

Covers the proceedings of the association from the third convention in 1916 to the twenty-fifth in 1938, inclusive. Supplementary pages bringing the index down to date will be provided from time to time by the Division of Labor Standards.

A statistical approach to accident prevention. By Max D. Kossoris. (In Journal of American Statistical Association, Washington, September 1939, pp. 524-532)

A discussion of a new method of accident-cause analysis leading to statistics which are of practical value in the prevention of industrial accidents. The method of analysis is essentially that contained in the so-called Heinrich Cause-Code now being formulated under the auspices of the American Standards Association.

The organization of safety services in industrial undertakings in Hungary. (In Industrial Safety Survey, International Labor Office, Geneva, July-August 1939, pp. 93-98.)

Safety provisions for underground work in coal mines: Volume 1, National legislation; Volume II, Draft recommendations. Geneva, International Labor Office (American branch, 734 Jackson Place NW., Washington, D. C.), 1939. 444 and 112 pp.

This report was assembled for the Preparatory Technical Conference on safety in coal mines, scheduled for October 1939 but postponed to a later date.

Progress of State insurance funds under workmen's compensation—a quarter century of American experience. By John B. Andrews. Washington, U. S. Department of Labor, Division of Labor Standards, 1939. 42 pp. (Bulletin No. 30.)

Commentaire de la loi du 1<sup>er</sup> Juillet 1938 sur les accidents du travail et les maladies professionnelles. Supplément à la huitième édition du traité d'Adrien Sachet. Paris, Librairie du Recueil Sirey, 1939. 586 pp.

Paris, Librairie du Recueil Sirey, 1939. 586 pp.

Analyzes the French law of July 1, 1938, dealing with industrial accidents and

#### **Industrial Relations**

Administrative adjudication of contract disputes: The Walsh-Healey Act. By Walter Gellhorn and Seymour L. Linfield. (In Michigan Law Review, Ann Arbor, April 1939, pp. 841–873.)

The collective labor agreement—how to negotiate and draft the contract. By Elias Lieberman. New York, Harper & Brothers, 1939. 233 pp., bibliography. The first part of the volume gives the historical background of collective bargaining, its operation under federal legislation, its legal status, and methods of negotiating an agreement. The second part offers sample clauses, with notes on

problems and legality and on the numerous items contained in agreements, including hiring and discharge of workers, dismissal compensation, vacations, overtime, sick leave, seniority rights, union shop, preferential shop, closed shop, check-off systems, and many other provisions.

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The economics of collective bargaining. By M. Bronfenbrenner. (In Quarterly Journal of Economics, Cambridge, Mass., August 1939, pp. 535-561.)

Freedom of association and the law. By J. Finkelman. [Toronto], 1939. 14 pp.; mimeographed. (Publications of Industrial Law Research Council prepared for Labor Research Institute, volume 4, No. 1.)

A discussion of the workers' right to organize and to bargain collectively in Great Britain, in the United States, and in Canada, with an analysis of the bill, which has been referred to as an "Ontario Wagner act", sponsored by the Trades and Labor Congress of Carada for the Province of Ontario.

The organization and functioning of industry committees under Fair Labor Standards Act. By Z. Clark Dickinson. (In Law and Contemporary Problems, Vol. VI, No. 3, Durham, N. C., 1939, pp. 353-367; also reprinted.)

One of the articles in the symposium on the wage and hour law comprising the summer 1939 issue of Law and Contemporary Problems.

Elections and certifications of labor organizations conducted by New York State Labor Relations Board, July 1, 1937, to June 30, 1939. By Louis Goldberg. New York City, State Labor Relations Board, 1939. 31 pp.; mimeographed.

Control of labor relations in Commonwealth of Australia. By Herbert V. Evatt. (In University of Chicago Law Review, Chicago, June 1939, pp. 529-551.) Historical review of legislative regulation of labor relations in Australia and discussion of the results of the system, with a comparison of conditions in Australia with those in the United States under the National Labor Relations Act, by the

Justice of the High Court of Australia.

Two strikes and out. Edited by William E. McMahon. Garden City, N. Y., Country Life Press Corporation, 1939. 156 pp.

An account, edited by a legal expert with first-hand knowledge of the course of events, of the development in Mexico of close relationship between Government and labor, and the part played by labor in the expropriation of foreign-owned petroleum properties in 1938.

### Labor and Social Legislation

Digest of State and Federal labor legislation enacted July 1, 1938, to July 1, 1939. Washington, U. S. Department of Labor, Division of Labor Standards, 1939. 51 pp. (Bulletin No. 32.)

Labor legislation in Canada, 1938. Ottawa, Department of Labor, 1939. 112 pp.

Manuel de législation ouvrière. By Roger Picard et André Choquet. Paris, Librairie Delagrave, 1939. 341 pp. Manual of French labor legislation for the use of technical and other schools.

Handbook to the Factories Act and Truck Acts [Great Britain]. By Joseph Owner. London, Sir Isaac Pitman and Sons, Ltd., 1939. 151 pp. Simple statement of the provisions of this legislation.

Principles and problems of Indian labor legislation. By Rajani Kanta Das. Calcutta, University of Calcutta, 1938. 281 pp.

The author discusses the historical background and social significance of labor

legislation in India; legislative procedure; fundamental principles; and the principal problems, which he classifies under development of labor policy, development of industrial labor, and organization of the State function.

#### Labor Organization and Activities

The Brotherhood of Locomotive Engineers. By A. Johnston. (In Labor Information Bulletin, U. S. Bureau of Labor Statistics, Washington, September 1939, pp. 1-4; illus.)

The rise and fall of Austrian labor. By Ernst Karl Winter. (In Social Research,

New York, September 1939, pp. 316-340.)

A footnote to the article states that it "expresses the opinion of an observer who was in close contact with the events discussed," and also that "it is not intended

deal with all the implications of the subject, and particularly it has intentionally disregarded the international background of Austria's downfall."

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arch, who Registered trade unions [in Great Britain], statistical summary, 1928-38. London, Registry of Friendly Societies, 1939. 5 pp.

Statistical analysis showing number and membership of registered trade-unions and their financial operations.

Proceedings and reports of General Federation of Trade Unions from July 1938 to June 1939. London, General Federation of Trade Unions, 1939. Various paging.

Le categorie commerciali nell'ordinamento corporativo fascista. By Riccardo del Giudice. (In Il Assistenza Fascista, Cassa Nazionale Malattie per gli Addeti al Commercio, Rome, March-April 1939, pp. 137-150.)

Account of the organization of the personnel of commercial undertakings in Italy, with information on collective labor contracts, mutual sickness-benefit provisions, and the larger aspects of the organization and administration of commercial workers' associations.

### Legal-Aid Work and Small-Claims Courts

Frontiers of legal-aid work. Edited by John S. Bradway. (In Annals of American Academy of Political and Social Science, Volume 205, Philadelphia, September 1939, pp. 1-140.)

Symposium designed to show the progress made and the types of problems with which the organized legal-aid movement is now engaged. The papers presented include: Legal aid and the promotion of justice; Surveying the need for legal-aid work; Legal aid as part of a community program; National aspects of legal aid; Benefits of regulating the small-loan business; The small wage earner in legal trouble; Legal-aid service to injured workmen; Small claims and conciliation courts.

The work of legal-aid committees of bar associations. By John S. Bradway. Chicago, American Bar Association, Standing Committee on Legal Aid Work, [1938].

Records the increasing interest of the bar in legal-aid work, and evaluates the work of the legal-aid committee of the American Bar Association and of the legal-aid committees of State and local bar associations.

Wage-earner receiverships. (In University of Chicago Law Review, Chicago, April 1939, pp. 459-467.)

Analysis of the chapter of the national bankruptcy law (Chandler Act) which provides aid for wage earners in adjusting and liquidating their debts.

Work of District of Columbia Small-Claims Court. By Edward M. Carr. Washington, U. S. Bureau of Labor Statistics, 1939. 13 pp. (Serial No. R. 975, reprint from August 1939 Monthly Labor Review.)

## Migration of Labor and Industry

Factories in the field: The story of migratory farm labor in California. By Carey McWilliams. Boston, Little, Brown and Company, 1939. 334 pp., bibliography.

Traces the development of large-scale, diversified, and mechanized agriculture in California, and sets forth what the author believes are the reasons for the rise of what he calls "farm faseism" in the State, and discusses the possibility of its extension. According to the report, some 200,000 homeless and destitute migratory workers are "trapped" in California and intimidated by their employers.

Migratory cotton pickers in Arizona. By Malcolm Brown and Orin Cassmore. Washington, U. S. Works Progress Administration, Division of Research, 1939. 104 pp., charts, illus.

Analyzes the fundamental causes of the insecurity and need existing among refugees from Texas and Oklahoma who follow migratory jobs on the large-scale industralized farms of the Southwest.

Rural migration in the United States. By C. E. Lively and Conrad Taeuber. Washington, U. S. Works Progress Administration, Division of Research, 1939. xxi, 192 pp., bibliography, charts, illus.

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A study of the movements of the rural population before and after 1930 and of the relation of this migration to such important factors as quality of land, economic status, population growth, drought, unemployment, and the need for public works and relief.

Final report of Commission on Interstate Cooperation [Massachusetts] to General Court concerning migration of industrial establishments from Massachusetts. Boston, 1939. 79 pp. (House No. 2495.)

### Minimum Wage

- Minimum wages, September 1, 1938, to September 1, 1939. A report to annual meeting of International Association of Governmental Labor Officials, September 7-9, 1939, Tulsa, Okla. Submitted by Louise Stitt. Washing. ton, U. S. Department of Labor, 1939. 8 pp., mimeographed.
- The prevailing minimum wage standard. By O. R. Strackbein. Washington, Graphic Arts Press, 1939. 187 pp.
- Study of the wage standard established by the United States Government for the purchase of its supplies, under the Public Contracts [Walsh-Healey] Act of 1936. A brief reading list is appended.
- State minimum-wage orders for beauty-culture occupations. Washington, U. S. Women's Bureau, 1939. 51 pp., mimeographed.
- Annual report of Minimum Wage Board of District of Columbia, for period January 1, 1938, to December 31, 1938. Washington, [1939]. 58 pp.

#### Negro Labor and Social Conditions

- The Negro family in the United States. By E. Franklin Frazier. Chicago, University of Chicago Press, 1939. xxxii, 686 pp., bibliography.
- Traces the evolution of the Negro and his family in this country from slavery to the present day. In urban communities where the boundaries of caste tend to become blurred, Negroes and whites in the same occupational groups have closer contacts than in the past, the author points out. These contacts, he states, are now facilitating the assimilation of "only the more formal aspects of white civilization."
- The Philadelphia Main Line Negro—a social, economic, and educational survey. By
- Marvin E. Porch. Philadelphia, 1938. 125 pp.
  In 1930 the population of the Main Line, a suburban residential section on the Main Line Division of the Pennsylvania Railroad as it leaves Philadelphia on the west, was 81,488, of whom 6,073, or 7.45 percent, were Negroes. Among the many subjects reported on in this study are the occupations, businesses, professions, and housing of the Negroes residing in this area.
- Biennial report of Bureau of Negro Welfare and Statistics, West Virginia, 1937-38.
- Charleston, [1939?]. 89 pp., charts, illus.

  Negro population, education, illiteracy, occupations, business institutions, and organizations are among the subjects covered.
- Special problems of Negro education. By Doxey A. Wilkerson. Washington, U. S. Advisory Committee on Education, 1939. xvi, 168 pp. (Staff study No. 12.)
- The participation of the Negro in vocational education, vocational rehabilitation, and emergency education programs is discussed.

#### Occupations

- Create your own job; A constructive plan for guiding relief clients into self-support.

  By W. A. McKeever. Oklahoma City, School of Psychology Press, 1939.
  - 235 pp. Lists 270 employment projects, with suggestions for making them serviceable.

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port. 1939. able. Highway jobs: A study of employment in highway construction and maintenance. By R. E. Royall. Chicago, Science Research Associates, 1939. 48 pp., illus. (Occupational monograph 8.)

Presents data on background, training, qualifications, and salaries and wages

for engineering jobs.

Public housing creates a new profession. By Beatrice Greenfield Rosahn. (In National Municipal Review, New York, August 1939, pp. 573-578.)
This article is devoted to the demand for trained managerial staffs to man the large-scale low-rent housing projects.

Occupational outlook for Georgia youth: Volume I, Savannah; Volume II, Columbus; Volume III, Albany; Volume IV, Griffin; Volume V, Atlanta. Atlanta, National Youth Administration of Georgia, 1939. Various paging. Information is included on wages, hours, educational requirements, and oppor-

tunities in business, industry, and professional and other services.

An occupational classification for research workers: College graduates—men. By Philip J. Rulon and Robert J. Blanton. Cambridge, Mass., Harvard University, Graduate School of Education, 1939. 47 pp.

#### Personnel Management

The human factor in business: Further experiments in industrial democracy. By B. Seebohm Rowntree. London, Longmans, Green & Co., 1938. 244 pp., illus. 3d ed.

Treats of the program and experience of the Rowntree Cocoa Works, where democratic methods of management are the practice.

Personnel administration: Analysis of modern employment procedures, present personnel practices in Kansas, and merit systems in other States. Preliminary report. [Topeka?], Kansas Legislative Council, 1938. 47 pp.; mimeographed. (Publication No. 89.)

Personnel enhancement in school and industry. By John D. Beatty. Pittsburgh, Pittsburgh Personnel Association, 1939. 22 pp.

Report on current activities being carried on in school and industry, which are promoting the development of effective personalities. Such development, the author holds, will not only make for the production of improved goods and services but tend to form better citizens, more capable of enjoying life through the intelligent use of time.

A list of references on civil service and personnel administration in the United States, Federal, State, and local (supplementary to mimeographed list of 1936). Compiled by Ann Duncan Brown. Washington, Library of Congress, Division of Bibliography, 1939. 55 pp; mimeographed.

Company plans for employee promotions. Princeton, N. J., Princeton University, Industrial Relations Section, 1939. 48 pp.

Covers methods used by 25 companies for promoting their employees to

higher positions, including an analysis of job classifications and personnel records, a description of training programs, and an evaluation of the various methods used.

# Relief Measures and Statistics

America builds; the record of the PWA. Washington, U. S. Public Works Administration, 1939. 298 pp., charts, illus.

Analysis of civil works program statistics. Washington, U. S. Works Progress Administration, 1939. 35 pp., charts. One section of the report covers employment and earnings on CWA projects.

The community welfare picture in 29 urban areas, 1938: A summary of expenditures for health and welfare activities and of reports of cases dealt with in the fields of relief and child care. Washington, U. S. Children's Bureau, 1939. 69 pp., charts.

A list of references on the United States Civilian Conservation Corps (supplementary to mimeographed list of June 1937). Compiled by Ann Duncan Brown. Washington, Library of Congress, Division of Bibliography, 1939. 14 pp.; mimeographed.

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Standards of eligibility and selection for junior enrollees [in the Civilian Conservation Corps]. Washington, U. S. Civilian Conservation Corps, 1939. 34 pp.

Aiding needy persons in Missouri. A report on programs of the State Social Security Commission and the development of public relief. Jefferson City, State Social Security Commission, 1939. 180 pp., charts.

Statistics on operation of old-age assistance and aid to dependent children, and data on the Civilian Conservation Corps.

Provisions for old age assistance in New Jersey: A guide for applicants and recipients. Trenton, New Jersey Department of Institutions and Agencies, Division of Old Age Assistance, 1939. 11 pp.

Questions and answers on points on which applicants for old-age assistance

need information.

Las instituciones de previsión social de Buenos Aires. By Marcos Flores A. (In Revista Trimestral del Instituto de Jubilaciones y Pensiones del Uruguay,

Montevideo, July 1, 1939, pp. 30-40.)

The second and final part of a report on the social-welfare institutions of Buenos Aires, with a résumé of both parts of the report. This second part contains a full account of operation and some statistics of the retirement and pension fund for bank employees.

#### Wages and Hours of Labor

Wage rates and earnings in cotton weaving. By E. M. Gray. (In Transactions of Manchester [England] Statistical Society, session 1938–39; 22 pp., charts.) The article discusses changes in earnings and rates of wages in the Lancashire district of England from 1886 to 1937, and gives statistics of earnings and rates for each year from 1906 to 1929 and of earnings as of June 12, 1937.

Wages and hours in drugs and medicines and in certain toilet preparations. By Arthur T. Sutherland. Washington, U. S. Women's Bureau, 1939. 19 pp. (Bulletin No. 171.)

Wage differentials: A study of wage rates in Philadelphia metal plants. By C. Canby Balderston. Philadelphia, University of Pennsylvania, Wharton School of Finance and Commerce, 1939. 39 pp., charts. (Industrial Research Department monographs, Wage series No. 1.)

Definitions of occupations are given in an appendix to the report.

Earnings and hours in shoe and allied industries, during first quarter of 1939, Washington, U. S. Bureau of Labor Statistics, 1939. 86 pp. (Bulletin No. 670.)

#### Youth Problems

L'avenir des jeunes. By Pierre Chassing. Paris, Éditions Spes, [1938?]. 173 pp. Describes the serious situation confronting youthful job seekers in France, and proposes some solutions for their difficulties.

The needs of youth. By A. E. Morgan. London, Oxford University Press, 1939. 434 pp., illus.

A picture of the various public and private services concerned with the better care of youth in Great Britain, and an analysis of the possibilities of coordinating such services to the greater advantage of these young people.

Youth in European labor camps. By Kenneth Holland. Washington, American Council on Education, American Youth Commission, 1939. 303 pp., illus. Since several nations in Europe had had experience with labor camps for youth previous to the organization of the CCC in the United States, the American Youth Commission felt that a survey of the foreign programs would be an important supplement to the study of such camps in the United States.

The present volume is based to considerable extent on the experiences of the author in visiting, and in certain cases working, in labor camps in the United States

and nine other countries over a period of 7 years.

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